

SOUTHERN TEXTILE BULLETIN

VOL. XIV.

CHARLOTTE, N. C., THURSDAY, FEBRUARY 28, 1913

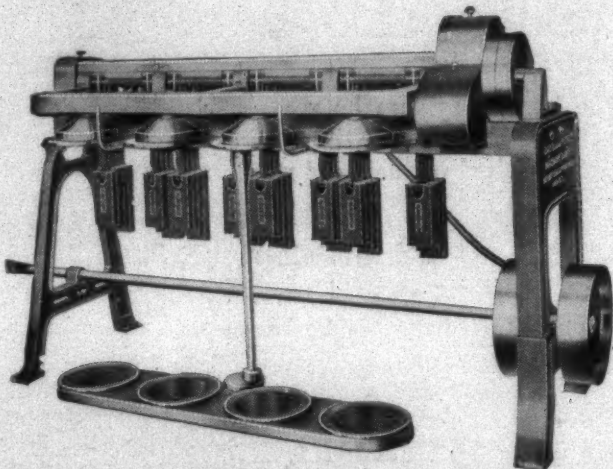
NUMBER 26

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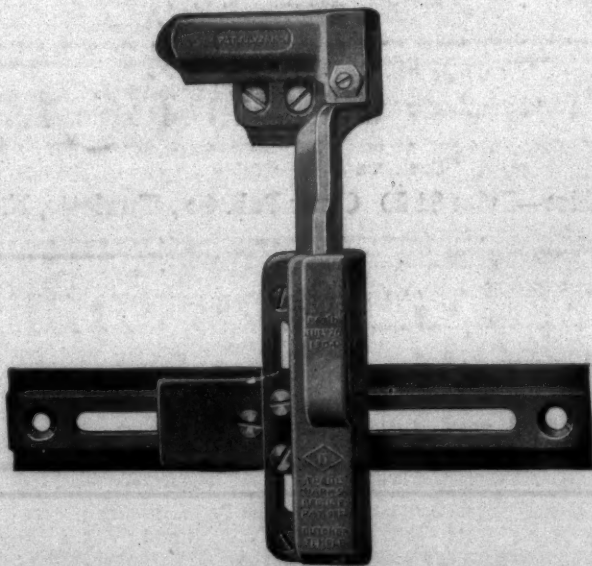
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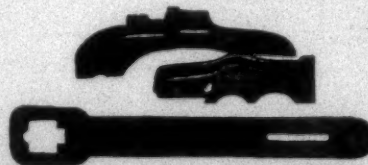
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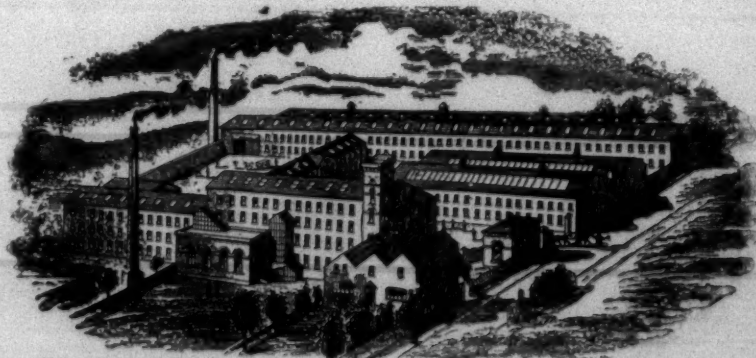
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What Ball Bearings Mean to Cotton Machinery

By Horace Niles Trumbull, of S K F Ball Bearing Company

The following are extracts from tests on motor driven ring spinning frames. Each frame was identical, spinning the same yarn at the same time and with the power consumed by the driving motor itself deducted in all cases, giving exact net horsepower required to drive the frame itself.

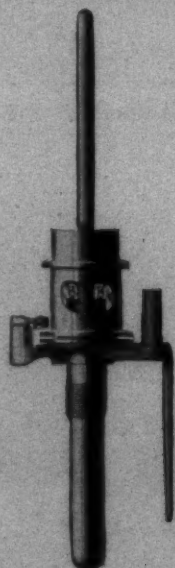
472 Spindles, 2 1/5-inch Gauge, No. 33's Yarn.

Cylinder speed, r. p. m. 790; spindle speed, r. p. m. 8,500; power consumed, plain cylinder bearings 4.90 h. p., ball bearings, 4.38 h. p., power saved 52 h. p.

Cylinder speed, r. p. m. 870; spindle speed, r. p. m. 9,300; power consumed, plain cylinder bearings 7.17 h. p., ball bearings 6.24 h. p., power saved .93 h. p.

Cylinder speed, r. p. m. 1,000; spindle speed, r. p. m. 10,800; power consumed, plain cylinder bearings 10.62 h. p., ball bearings 9.12 h. p., power saved 1.50 h. p.

This shows savings varying from



Tape Spindle, "S K F & J" Ball Bearing Twister Spindles Made by Fales & Jenks Machine Co.

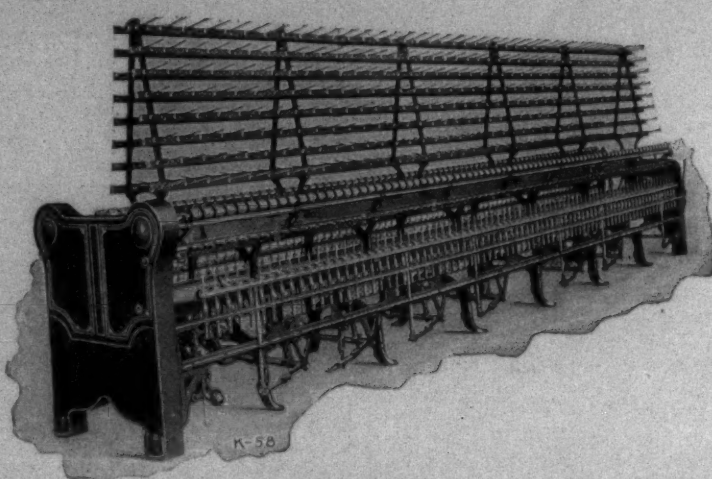
10 to 15 per cent of the net power and also proves that as the speeds are increased, so are the power savings.

The other test was as follows:

364 Spindles on No. 24's Yarn.

Cylinder, plain bearings: Motor speed, 1,300 r. p. m.; cylinder speed, 820 r. p. m.; spindle speed, 8,220 r. p. m.; power consumed, 4.133 h. p.; No. of spindles to 1 h. p., 88.

Cylinder, ball bearings: Motor speed, 1,320 r. p. m.; cylinder speed,



Tape Driven Ring Twister Made by Fales & Jenks Machine Co. With Disks and Cylinder Boxes.

840 r. p. m.; spindle speed, 8,380 r. p. m.; power consumed, 3.906 h. p.; No. of spindles to 1 h. p., 93.

Which shows, by the use of ball bearings, an increase of spindle speed of 150 revolutions, or about 2 per cent increase in production, and at the same time a power saving of 227 h. p. or 5 1/2 per cent of the total power. In this country various tests have been made and the results have been practically the same as those above. One of the largest spinning frame manufacturers in this country conducted a series of tests in their own experimental department and found a saving of about 50 per cent of the power required to drive the cylinder bars, and no increase in power consumption on starting. That is, the starting effort was no greater than the power required for machine in operation.

Twister Spindles.

The successful development of the

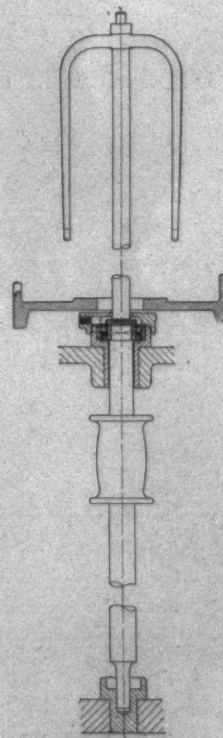
ball bearing twister spindle has added to twisting frames the factor of greater production per unit of driving power and a marked improvement in the uniformity and tensile strength of the yarn. The reason for these improvements are easily analyzed.

A ball bearing is nearly frictionless. The lighter running of the ball bearing spindle is maintained over a wide range of band tension, because the co-efficient of friction of ball bearing does not change under changing loads. Any variation in band tension has, therefore, little or no effect on the speed of ball bearing spindles and a uniform yarn can be expected from all boggins, whether taken from newly banded frames or those that have been in use for a considerable length of time.

Ball bearing twister spindles, because of their easy driving, will produce yarn of uniform and full theo-

retical twist and in many cases the calculated twist may be less than that required by plain bearing spindles. On account of the lighter running of the ball bearing spindles, there is a decided reduction in slippage of belts and bands, therefore higher spindle speed may be obtained, giving greater production, less breakage, stronger and more uniform yarn.

Yarn taken from ball bearing spindle twistors will make a fabric of higher average tensile strength than that from plain bearing band drive twistors. The fabric will test to a more uniform tensile strength and thereby fewer rejections or seconds need be made. In mills operating

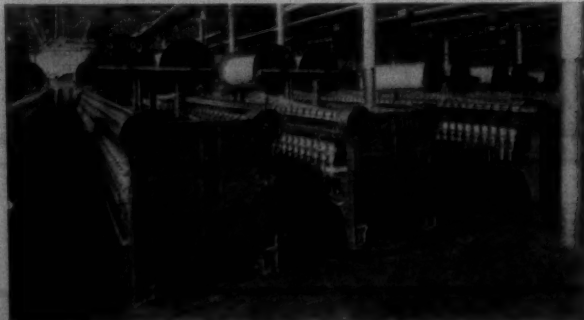


Arrangement Showing Mounting of Ball Bearing for High-Speed Jute Twister Spindle.

old band drive twister spindles this feature of uniform quality of product is alone worth the investment in ball bearing twister spindles.

The use of band drives necessitates frequent adjustment. A tight band introduces the danger of a hot spindle bearing, probably with excessive wear; a loose band allows of slippage that invariably affects the finished product. The variation of humidity, of spindle bearing temperatures, and oils—the cleanliness

(Continued on page 10.)



132 Spindle Frame With Fales & Jenks Ball Bearing Twister Spindles Which Has Been in Operation for a Period Equivalent to More Than Six Years.

A Notable Birthday.

From a business in whale oil of a few thousand dollars yearly, 65 years ago, to a business in scientific lubricants which runs into the millions, is the enviable record of the Swan & Finch Company, which has just celebrated its 65th birthday.

The Swan & Finch Company is one of the oldest and largest manufacturers of special oils and greases in the United States. Its business was started way back in February, 1853, in a small building at 44 Water street, New York city. It has grown, until today the main plant of the company, at Bayway, New Jersey, covers over 15 acres, with piers at which tank boats and seven ocean-going steamers dock.

The original business of the company was in the sale of illuminating oils and lubricants such as were used in 1853, consisting of fish and animal oils; sperm and other whale oils, sea elephant oils, black fish and lard oils.

These products were marketed at that time, chiefly through the wholesale grocers of New York city.

The company was among the first to refine menhaden fish oil, one of the products of its own fishing fleet, and is still the largest concern in the world in this line of business.

When the use of refined petroleum for lubricating purposes was discovered, this concern was one of the first to market mineral oils as lubricants, and to manufacture lubricating greases with a mineral oil content.

The further development of the company corresponds in a large measure with the later developments in the science of lubrication.

The company was the first to build up a world-wide business in oils for the lubrication of marine engines, and the Atlas trade mark, one of the oldest oil trade marks in existence, took its name, in fact, from the old Atlas line of steamers, to which it sold the first of its products.

Special oils for use in railroad work, was also a large factor in the growth of the company whose development along engineering lines has been such that for special purposes alone, its products are sold throughout the world, in no less than 103 industries.

Its various special products, developed for special purposes, have

been placed on the market through its various branch offices, agencies and jobbers, under the old Atlas trade mark, and latterly, each with its own separate trade name.

Slo-Flo, for instance, a special product developed for textile mill machinery, has been found highly valuable for many other uses. It is particularly adapted for use as a lubricant in textile machinery, for roller bearing, line shafting, electric motors, printing machinery, and other special purposes where a slow-flowing lubricant is required.

Cupese is the general name of a line of high quality cup greases.

Gearese, a lubricant for motor car transmissions and differentials.

Textul, an oil product for wool and worsted manufacturing purposes.

Aerul, an oil for airplane motors, which has been adopted by no less than three of the allied governments.

Motul, a motor oil for automobile cylinder lubrication.

Asbestese, an asbestos and wool, mixed grease combination for railway car journals.

Corul, a combination of oils for core making in malleable and gray iron casting work.

Marinul, for marine engines.

Telese, an economical grease for drop forged die-swabbing.

All of these products have been developed to meet certain specific requirements, necessitated by the advance in science and manufacture.

The other products of the company, included under the Atlas trade mark, are a complete line of engine oils, cylinder oils, turbine

case oils, dynamo and motor oils, crank case oils, transformer oils, cutting oils, tempering and quenching oils,

leather oils, spindle, loom and wool building up a world-wide business in oils, and the fish oils referred to above.

The company has also marketed a number of high grade special oils for soap and leather manufacture, and many vegetable oils such as peanut, soya bean, cocoa nut, etc.

Today the Swan & Finch name and trade-mark are being blazoned far and wide, by national advertising in general magazines and special trade papers, and it is possible to buy the products of the company through its agents in almost any city in the world.

It can probably be said that the entire development of the company has come from the "service idea"

in the effort to develop for its customers, special products definitely suited to the peculiar needs of each. The company now maintains a corps of chemists and field engineers whose duty it is to analyze the needs of each of its customers, and supply from its store of information the special product required, and where necessary to develop new products to meet new needs.

This sounds like a pretty big problem, and it is, for the Swan & Finch Company manufactures 197 separate and distinct oils and greases, covering a wide range of mechanical uses, from the lubrication of airplanes, to the manufacture of foundry casting cores.

The company has classified 103 industries, in which one or more of its oils are used, and no one of these industries thinks in just the same terms, or is faced by just the same conditions as any other.

Altogether, the Swan & Finch record is one to be proud of.

Imports of Manufacturing Materials Doubled.

The 1917 activity of the manufacturers of the United States is evidenced by the fact that the value of manufacturing material imported in 1917 was double that of 1915. The National City Bank of New York, in the calendar year 1917, was in round terms \$1,800,000,000 against \$957,000,000 in 1915 and \$874,000,000 in 1914. Manufacturing material formed in 1917 61 per cent of the total merchandise imported against 54 per cent in 1915 and 49 per cent in 1914.

Another evidence of the activity of the manufacturers of the United States in the year just ended, is found in the fact that the value of manufactures exported in the calendar year 1917 aggregated nearly \$4,000,000,000 against \$1,794,000,000 in 1915 and \$974,000,000 in 1914.

Thus manufacturing material imported in 1917 was nearly double that of 1915 and more than double that of 1914, and manufactures exported were more than double those of 1915 and four times as much as in 1914, the year in which the war began.

These large increases in manufacturing material imported occurred in nearly all of the important articles of foreign production required in our industries. Hides imported

in 1917 show a slight increase in quantity when compared with 1915, but a large advance in total value, aggregating for 1917 over \$200,000,000 in value against \$173,000,000 in 1916, \$127,000,000 in 1915 and \$112,000,000 in 1914. Raw silk imports of 1917 show a total value of nearly \$200,000,000 against \$150,000,000 in 1916, \$95,000,000 in 1915 and \$93,000,000 in 1914. Wool imports of 1917 aggregate in value over \$150,000,000 against \$125,000,000 in 1916, \$95,000,000 in 1915 and \$58,000,000 in 1914. Fibers show an aggregate value in 1917 of about \$100,000,000 compared with \$66,000,000 in 1916 and \$45,000,000 in 1915. Raw cotton shows a total value for 1917 of approximately \$46,000,000 against \$26,000,000 in 1915 and \$23,000,000 in 1914.

While some parts of these large increases for 1916 are due to higher prices, the quantities imported are in most cases much larger, especially when compared with 1915. Rubber imports for 1917 are nearly double those for 1915; silk about 25 per cent more than in 1915; wool, despite the scarcity and extreme high prices, slightly more than in 1915 but less than in 1916, and hides slightly in excess of 1915 but below the total of 1916.

The share which the manufacturers of the country have in the foreign trade shows a marked growth as a result of the war. Raw material imported for manufacturing formed in 1917 43 per cent of the total imports against 33 per cent in 1914, manufactures for use in manufacturing 18 per cent compared with 15 per cent in 1914, and total manufacturing material 61 per cent of the total imports of 1917 against 48 per cent in 1914. Manufactures exported formed in 1917 66 per cent of the total exports against 51 per cent in 1915 and 47 per cent in 1914.

A lady knit a pair of stockings and sent them to the war, with her name inside, hoping to hear from the recipient. The word she received was as follows:

"Lady:
The socks received; they almost fit;
I wear one for a helmet, and one for a mitt,
I hope to meet you when I've done my bit—
But where in — did you learn to knit?"—Ex.

MAKE EVERY CAR OF COAL LAST LONGER

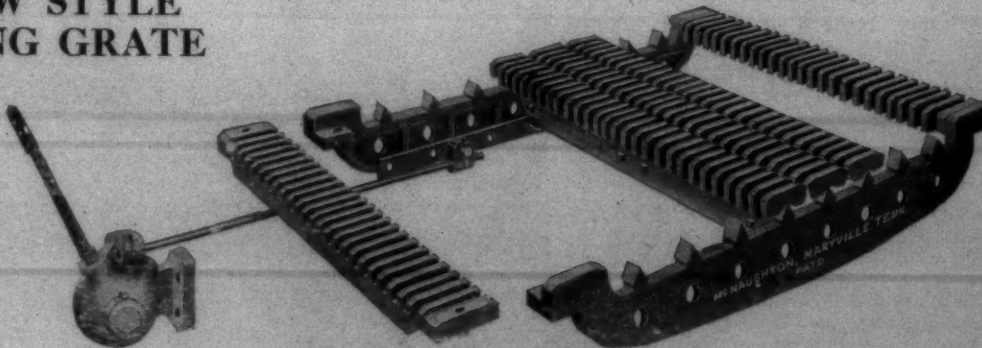
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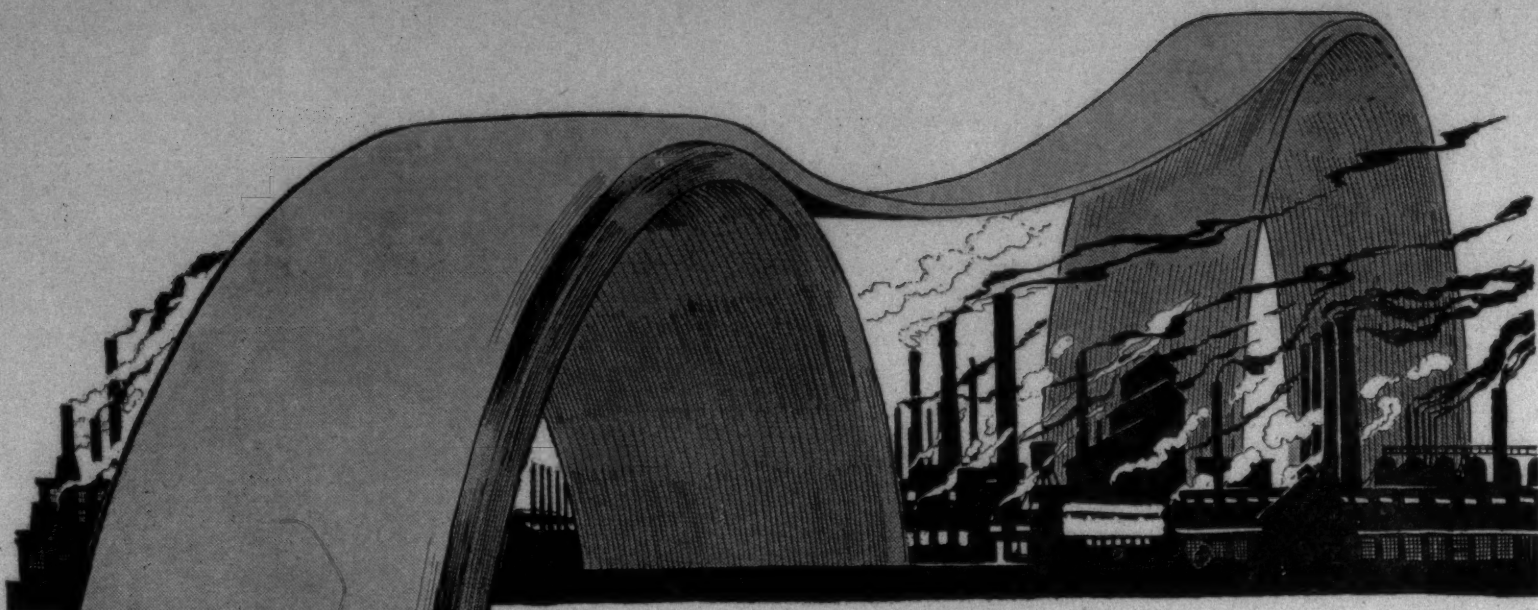
It saves coal because it gives better combustion and because the fireman just naturally does his work so much better and easier with the use of it.

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The Power that Controls Production

THE great, big, dominating factor in textile mill operation is the efficient transmission of power from engine to the looms and spindles. Poor belting means loss of time and reduced output. The stress of the times demands

The Best that Can be Had.

Throughout the entire Southern Textile Industry the demand for "MONARCH" Leather Belting is growing stronger, more insistent every month. Experience has demonstrated that it is the MASTER of transmission problems, the controlling factor in textile mill efficiency.

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M. C. SANDERS
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GREENVILLE, S. C.



Grinding, Setting and Operating Cards

Article contributed to a prize contest on this subject.

A Splendid Contest.

A superintendent who had many years experience as overseer of carding told us last week that the contest articles on "Grinding, Setting and Operating Cards" were unusually good and that he had already obtained several valuable ideas from them.

While the articles are necessarily very much alike there are special points brought out by every writer and it will benefit every mill man, except the "know it all kind" to read them closely.

Every article in this contest is written by a man who has spent a good portion of his life in a card room.

In order to secure a closer reading of the articles we have offered a special prize for the first man who guesses the article that wins first prize and at the end of the article this week will be found a blank for that purpose.

The winner of this prize will be entitled to almost as much credit as the winner of the first prize because a man will have to know considerable about carding if he can pick out the winning article. Every subscriber to the Southern Textile Bulletin is entitled to two guesses during the contest. It costs nothing to make a guess and it may bring you \$2.00.

Number Thirteen.

"Grinding, Setting and Operating Cotton Cards":

To Grind a Card.—Cut the feed out and strip cylinder and doffer clean. Start the card and let the flats run clean. Take big gear off doffer and disconnect feed gear. Clean all flyings from under card. Belt cylinder and doffer to run backwards, and belt flats to run the same as when the card is working.

Start the card and brush the dust from cylinder and doffer with a soft hair brush made for that purpose. Then stop the card and put a traverse grinder on both cylinder and doffer. Belt both grinders to run with one band, by using the comb binder pulley. Put a drum grinder on the flats and set all grinders to a No. 7 gauge.

Start the card up and pull the grinder on the cylinder down at both ends, as hard as you can to avoid danger of setting fire. Pull the grinder on doffer down, not as hard as the cylinder but so it will make a few sparks. The grinder on the flats should be set lighter than the one on the doffer, or about as hard as you can set it without sparking but very little, if any.

The harder you grind the longer the point will be on the wire, and the lighter you grind the shorter the point will be, and the quicker it will get dull. If you grind just the edge of an axe it is called "dubbing it," and that is what happens to the wire from too light grinding, it is "dubbed off."

The stands that hold the cradle for the drum grinder should be set so the flat coming under the grinder will touch the grinder the full length of the flat at the same time and grind with the same pressure across the width of the flat. Do not let the flat first come under the grinder, striking sparks and come out from under it barely touching, or vice versa.

I have been in several mills where the wire one edge of the flat was ground off to the clip, and the wire on the other edge 1/32 of an inch longer. When in this condition it is best to have the flat reclothed then set the stands.

If the cradle is worn where the ends of the flats go through buy new cradles. See that the grinder strikes the flat with the same pressure at every part of the flats surface and all grinder rolls should be pulled down a little four times a day, and kept covered with a good emery that should be renewed when it becomes slick or the emery is worn off.

Cards working 150 lbs. per day

should be ground every third week, and if they are doing 75 lbs. per day every fifth week is often enough.

I went to a mill where the cards were doing 160 lbs. and ground every fifth week and in three or four days after grinding and setting the web would commence to have nits and other foreign matter and by the end of the fifth week it was awful. I put on another set of grinders so as to get every card ground every third week and in a few months the cards continued to do good work from one grinding to the next.

To Set a Card.—Setting cards has to be governed by the amount of, and quality of stock being run, and what per cent of waste is wanted to take out. To do 75 lbs. per card per day set every thing to a 7-gauge, but the front of the screen and the stripping plate. To do 300 lbs. per day per card the doffer is the only place to set to a 7-gauge.

The closer the working points are set without touching the better work will result, but the more pounds per day the further off the setting will have to be, for a card working from 125 lbs. to 175 lbs. a safe setting is doffer to a 7, flats and licker to a 10, feed plate to a 10 or 12, and mote knives to a 7. If lots of fly is wanted set the lip of licker-in screen close to licker-in, or if fly is not wanted drop the lip of screen from 1/4 inch to 3/8 inch from licker-in. The same setting will apply to the front part of front screen under cylinder next to doffer, while the bottom part of front and back cylinder screens should be set to a 22 and the back part of back cylinder screen should be raised as high as possible between licker and cylinder and set to cylinder to a 17 or 22, and set to the licker shrouds to a 7. The back plate above the licker should be set at bottom to a 22 and at top to a 17.

The mote knives should be set as close to licker-in as they will go without touching to get the most motes. The closer the stripping plate is to cylinder the less strips, and the lighter the lap the closer the feed plate is set to licker-in. The doffer comb should be set not closer than a 12, and set high enough to

The most important part is seeing that the cards are set when the time comes. The doffer should be set after every grinding, the backs after every other grinding, the flats every third grinding at least, and the cylinder screens should be taken out and cleaned three times each year.

Operating a Card.—Operating of cards should be done by rule. Have the entire line of laps set in at one time. If there are pieces have them all run on one card. Don't let the last end of a lap run in and choke the licker-in and knock the mote knives down. Have the entire line doffed at one time. Have a certain time to have cleaning done, and floor swept, so it will all be cleaned at one time.

If the card is doing 75 pounds a day, two times each day is often enough to strip, if doing over 100 pounds it ought to be stripped three times a day, and if over 180 pounds it should be stripped four times. The stripping roll should be set deep enough to clean the clothing, but not deep enough to touch the foundation of the clothing.

The flyings should be taken out from under the card once each day, and it helps the work to stop the card and brush the cylinder screen, the licker screen and mote knives off twice each day.

A very important part in operating cards is the oiling. All slow-moving parts should be oiled with 3 or 4 drops of oil every other day, while the fast moving parts should be oiled with 3 or 4 drops twice each day, and 3 or 4 drops is lots better than a tablespoonful.

I went to one mill that had been running only four years and all the selvages, or outside edges of the card clothing, on the cylinder were soaked with oil, and the wire wouldn't stand up under the grinding. Consequently the wire was longer in the selvage, and faced the flats. The flats should be kept burnished clean all the time, so they can do their work properly.

In conclusion, the card is usually the most overworked machine in the

Ashworth Brothers, Inc.

Tempered and Side Ground Card Clothing

Tops Reclothed

Lickerins Rewound

Cotton Mill Machinery Repaired

12 to 18 West Fourth St., Charlotte, N. C.

240 River Street, Greenville, S. C.

127 Central Avenue, Atlanta, Ga.

mill. If a card's production could be kept at 100 pounds or less for 10 hours it would be better for everybody concerned, and make stronger and cleaner cloth.

"Pea Knuckle."

Number Fourteen.

Forasmuch as many have taken it hand to set forth in order a thesis on "Grinding, Setting and Operating Cards," I appreciate the opportunity of entering it myself, for it will cause me to take more interest in the contest and obtain more knowledge.

"After the card has been stripped and the cylinder and doffer dusted out the grinder should thoroughly examine the clothing on them to see what condition it is in. All little defects should be corrected and everything put in good shape before putting on the grinding rollers.

When the rollers are put on they should be turned by hand and run from one side to the other of the card to see if they are rubbing too hard on the wire before starting the card. After the card is started they should be set medium light so they will spark occasionally when striking a high wire as they travel from one side to the other of the card.

The roller grinding the cylinder should be set a little heavier than the one grinding the doffer as it has more surface to grind and the wire is coarser than the doffer wire.

The cylinder, doffer, and flats should be ground not less than one day in every twenty-four working days. The man that is grinding

should take time to set the grinding rollers right before leaving them and go back to them every two or three hours during the day and listen to see if they are striking the wire properly. He should take the brush that he dusts out the cylinder and doffer with and brush the emery fillet so it will have a sharp grinding surface.

Grinding cards is a science that requires several years of experience for the average man to learn and some never learn it. I have seen men on grinding jobs that tried to learn the quickest way to get his card up and the rollers on another card so they could find some place to sit down or loiter around and "gas" with anybody they can get to listen to them. While on the other hand we have men that take pride in keeping the card clothing in good shape so they will strip out clean every time. Ends stay up on their cards and it is a pleasure for card hands to work on their section. A man like that is worth taking some interest in.

Setting—This is the most important part of it all and one that carders differ on more than any other subject pertaining to their work. Different makes of cards require different settings for some parts of them. The weight and grade of stock going through a card governs the settings to some extent. I have found the following ways of setting very satisfactory for Saco-Pettee cards using 12 ounce lap and making 50 grain card sliver.

I will say here that before beginning to set the different parts of a

card it should be thoroughly cleaned everywhere and all the oil holes picked out. Then take out the licker-in and lay it on two small trestle benches made for that purpose, then clean out around the mote knives and the licker-in screen.

Each grinder has a shaft with a pulley on it as near the exact size of the licker-in as we can make it, fitting the shaft snug but loose enough to slide it along on the shaft from one side to the other of the card. We have bushings on each end of the shaft to fit in the licker-in bearings. We put that in for the licker-in and get all of the dents or pockets of any kind out of the screen and put it in good shape, so we can set it the same all across the card. Set the solid part of the screen next to the cylinder to a 10-gauge from the pulley. The ribbed part of the screen next to the mote knives to $\frac{1}{4}$ inch from pulley. Set the mote knife stands so there will be about a 15-degree slant to the knives and set the top knife to 10 gauge and the bottom one to 7. Put the licker-in back in and correct any adjustments that need to be. Set feed plate to 10 gauge, back knife plate to 29, close settings of the back knife plate will make too much good flyings in the licker-in mote box.

Beginning at the back of the card, first, second and third stands of flats set to 10, fourth and fifth to 9, top knife plate to 29, bottom plate to 12, doffer to 7, doffer comb to 10, stripper comb to flats 10, spiral brush to knee of wire on flats, cylinder screen front $\frac{1}{4}$ inch, from cyl-

inder middle 22 gauge, back to 12 or, I might say, as close as it can be run without the cylinder fillet rubbing it.

The above settings will take out a sufficient amount of motes, trash and flyings and give good carding.

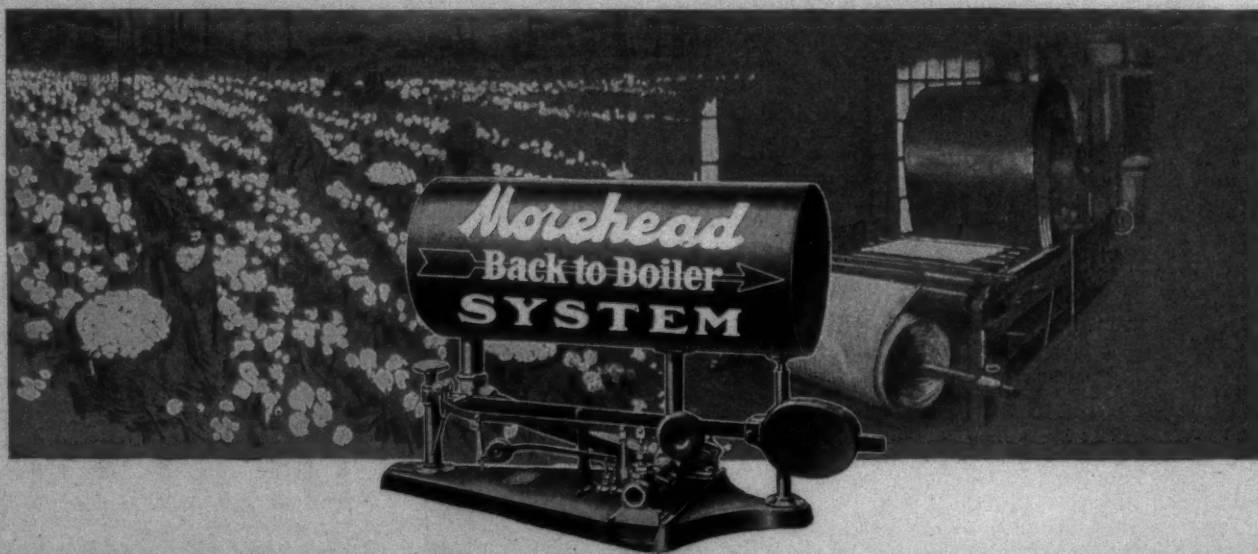
Price of cotton is now so high every carder should try to keep every pound of cotton from going to the waste house that he can without lowering the quality of the product. Neglecting the licker-in and its surrounding parts causes more poor carding than anything else about a card.

I took charge as overseer of one card room where all the grinders promoted and learned to grind there had never reset their mote knives and licker-in screens. Some of them had been on the job six to eight years. It is needless to say what kind of carding they were producing. After making the proper adjustments we saved enough in the amount of flyings made under the cards to pay the wages of the second hands and all the section men in the card room.

I have seen some men on overseer's jobs that never study so they can learn why a thing should be thus and so. It is an honor for a man to be rated as A-1, carder, spinner or weaver (not in his own estimation, but by other mill men that come in contact with him.) We should all be progressive and study the different men's ideas.

Operating Cards—They should be kept clean all the time, screens kept polished and all ribs in their place

(Continue on page 8.)



"—We are well pleased and consider it a profitable investment. Have no record of its having given us a moment's trouble."

WYSONG AND MILES CO., of Greensboro, N. C.—another big textile mill with a big, pleasing experience with the Morehead System. When the Morehead System makes such friends as this concern you certainly owe it to yourself to find out why. The Morehead System takes condensation from steam lines and returns it to the boilers as pure HOT feed water. That means greater efficiency and a saving of fuel.

Morehead Manufacturing Company,

Dept. T. B.
DETROIT, MICHIGAN

Grinding, Setting and Operating Cards.

(Continued from page 7.)

and all the dents or rough places of any kind for flyings to accumulate and come through to break down an end should be avoided. I decided several years ago that there was no reasonable excuse (except extreme changes in the temperature of the room) for an end to break down on the front of a card. A card should run days or weeks without having an end down, and when one comes down, it can be traced to some imperfection in the lap or the card not kept clean or fixed right, or not ground and set properly.

The grinder should stay on his job and look after the small details of it, keep his burnishing roll or slow motion stripping roll working all the time and set properly to the flats. Look over the flats and the other parts of the cards often, keep all the small jams straightened up, keep plenty of doffer comb ropes spliced and ready to use when one breaks. The grinder should have a glue pot and put on all belts endless. We have every main drive belt, licker-in, doffer and stripper belt put on endless. The licker-in, doffer and stripper belts are practically the same length on every card and we keep several of each kind on hand cemented together ready to put on when one breaks. We put on two-ply three-inch belting endless for the main drive belts and our grinders won't average more than two or three belts to a man breaking in a year's time.

It also makes each grinder an experienced belt man to use when taking up counter belts. It pays for a man to study his job and try to do the very best he can with it.

There are numerous things some grinders do to keep their jobs in good shape and others ought to do, but my space won't allow me to state any more now and I will leave them for the others to tell.

"Polished Shafting."

Number Fifteen.

I will endeavor to write a short article on "Grinding, Setting and Operating Cotton Cards."

In the first place, you should have a competent man to do the grinding. He should be a man of good sound judgment and not afraid of work.

In grinding a card the grinder should cut the feed from his card and let it run empty long enough to have flats clean and should have card cylinder and doffer stripped clean. Then he should take brush and dust out cylinder and doffer nice and clean and should look over both cylinder and doffer and if he finds any wire mashed down should take scraper made for the business and straighten up all wire. After this is done put on his traverse grinders and pull them down to a No. 5 gauge at each end of the card. This should be done in order to keep rollers from striking wire too heavy when started up. This will damage the wire. After this is done he should start up rollers and pull down just a little at each side till

he gets rollers striking all the way across the cylinder and doffer just the same way. Set roller on cylinder so it will sound just a little louder than the doffer. Let grind till card is sharp, then take rollers off and clean off card nice and clean.

To Set Card—First, set doffer to cylinder to a No. 7 gauge.

Licker-in to cylinder to slack No. 7 and tight on a No. 10.

Licker-in knives, top knife to a 17, bottom to a 29.

Licker-in screen, the blank part from licker-in to No. 29, the nose $\frac{1}{4}$ of an inch.

Then put on your feed plate and set to a slack 10 and a close 12.

Set cylinder screen from cylinder licker-in end to 29.

Cylinder screen from cylinder middle about 58, doffer end 3/16.

I could give several settings but I find this one will give better results than any I have tried as you get plenty of leaf and motes and very little fly. Here a carder can save a lot for the company.

Say you are using a one-inch cotton, if you take out too much fly you lose a lot of good stock which amounts to a great deal. Set stripping plate close enough to take out a very light strip on your plate, then set flats to a No. 10 gauge, that is, if you are carding a 45 or 50 grain sliver. Set front flat close on gauge middle, just a little farther off, and back to just a little looser than middle.

Clean out all gears and oil everything good and card is ready for work.

You should have a good even lap. Teach card hands to never let any laps run out, as this will choke your licker-in and sometimes cause screens to get bent up, bruise wire on your cylinders, and break bracket that holds mote bars.

Cards should be stripped according to class of stock being put through. The lower the grade the more stripping required. Twice per day is often enough on a good grade of cotton. Stripping should be watched after close. If you have a cylinder that doesn't strip clean it should be ground and burnished to get all hooked points off wire. Card hands should keep cards cleaned off every morning and evening.

The oiling should be looked after very close as a card oiler can ruin your clothing by putting too much oil on.

"A Scrub."

Number Sixteen.

There being no question among carders or grinders regarding a card being well ground to do good carding, I shall try to make my article brief on that point.

I consider that to properly grind a revolving flat top card; first, the clothing should be in good condition and, at least, fairly tight; second, the card should be cut out and well stripped. After the flats have been cleaned off the grinder should stop the card, take off all belts and clean out all fly from under the screen and all chokes from around cylinder and doffer. Then go over all the wire and straighten up any jams.

Cut Your Roller Covering Bill

"**DUREX TOP ROLL VARNISH** prevents lapping, preserves the leather, increases the life of leather top rolls thirty to fifty percent. 250 cotton mills in the South now use this varnish.

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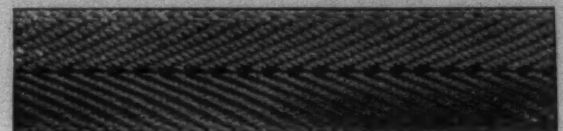
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Remove all parts necessary to be shape. In grinding too light you removed, brush card out and clean just grind the top of wire. Where all sand off while card is stopped. you find a card that the wire on the The emery should be clean and cylinder is slick it is a good idea to sharp to do good grinding. grind it about six hours with a drum roller and then follow it up with the traverse rollers.

Now start the grinding rolls. I usually run them a little heavy at the start and if card is in good condition only grind about three or four hours. Then the card will have a good point under usual conditions. I don't burnish cylinder or doffer.

The card being ready to set up, I set about as follows: Doffer to cylinder, 7/1000; comb to doffer 19/1000; stripping plate 34/1000; bottom plate 17/1000; flat medium 10/1000; for very fine work 9/1000; mote knife to 10 to 12/1000, bottom 15 to 19/1000; screen to licker-in cannot be set on all cards alike. At the back a Whitin card can be set up to a 10 or 12 gauge, while a Howard & Bullough can only be set up to about 1/4 to 5/16 inch. Other cards to a certain extent are built along the same lines.

The most important part about setting a licker-in screen is to prevent pocketing by giving the screen a slight taper to the front. Set the screen to cylinder at back 17/1000, center 34/1000, front 1/4 to 3/8 inch. This will also vary on different makes of cards. The knife plate I set to a 22 at top, and a 17 at bottom.

A card well ground and set as above mentioned on medium work will do good carding. Too close settings will not do as good work from one grinding to another as medium sets, although it looks good when first started. Good stripping is worth as much as good grinding, and clean cards are worth something in preventing bad work.

Cards should always be kept well oiled. Screens and licker-in being in bad fix will cause more bad work than most anything else. I regard the licker-in as the most important part of card. "Ranger."

Number Seventeen.

I wish to enter the contest of Card Grinding, Settings and Operation, and in taking up this subject I will say that grinding does not get the attention that it should in many cases. The grinder has so many cards per week to put up and he does this regardless of how the wire feels.

In starting to grind a card it should be certain that it is clean and all revolving parts well oiled. Take a gauge and examine the plates and be sure they are not rubbing, and be sure to keep good emery on grinding rolls. A good plan is to change emery every six days. And have a certain day to do this. After the card is ready for grinding the rolls should be put on the card and run by hand from one side of the card to the other to be sure that they are not rubbing the cylinder or doffer wire. Then put on the bands and start the card, and my plan is to set the grinding rolls to the doffer first, as it is generally set lighter than the cylinder rolls and in setting it first you can hear it better than when the roll on the cylinder is set first. I believe in grinding hard enough to press the wire a little and give the point the proper

tain hours for stripping and see that it is done, for if the card is not stripped when it should be it will have the grinder do his own oiling if become full and cause lots of trash possible, and in oiling be sure that and all foreign matter to come all oil holes are cleaned out. In through and get in the finished oiling comb boxes do not pour too sliver. Sometimes an end will come much in them as it will run out all down and run back over the doffer over the comb and cause the end to up and the operator will put up the should be watched closely and floor end without stripping the card, re- kept very clean. sulting in a nappy and bad web.

"New Carder."

Another Prize.

To the first one to pick the article that wins first prize in this contest we will give \$2.00. When you read an article that you consider good enough to win first prize, fill in the blank below and mail it to us. If that article wins first prize and you were the first to realize its merit you will get \$2.00 and it will prove that you know something about carding. No man will be allowed more than two guesses.

In my opinion Article No. which was signed

..... will win first prize in the contest on

Grinding, Setting and Operating Cards.

(Signed)

(Address)

Chemicals and Oils

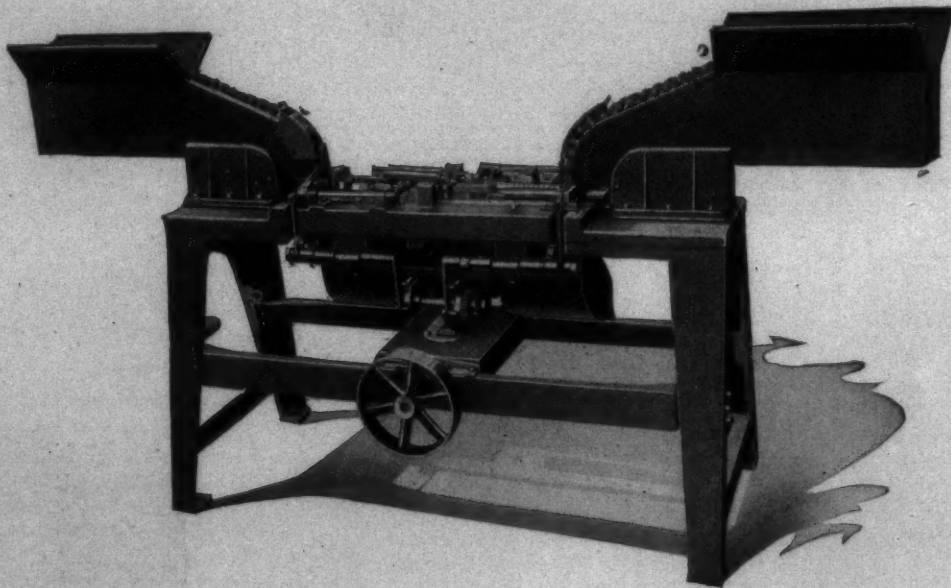
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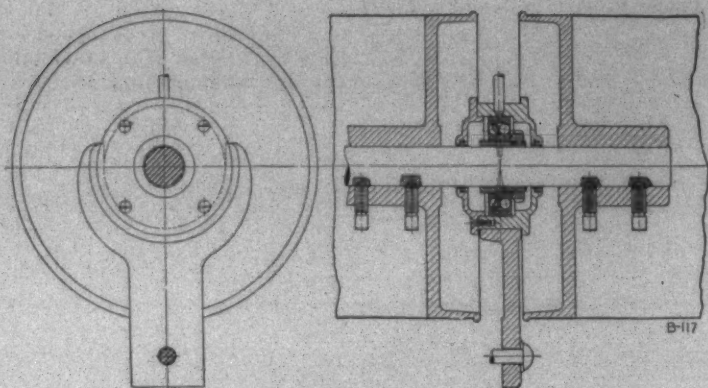
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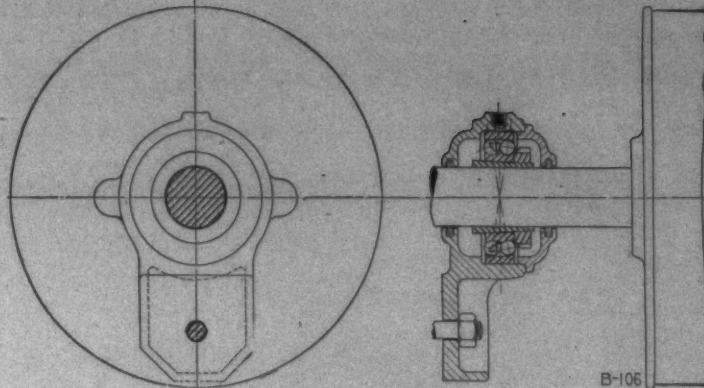
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S K F Ball Bearings on Intermediate Cylinder Bearings



Head Bearing of Cylinder Drum Mounted on Ball Bearings.

What Ball Bearings Mean to Cotton Machinery.

(Continued from page 3.)

of the spindle and condition of the bands—all affect the proper operation of plain bearing band driven spindles. All of these defects are less pronounced and, in most cases, entirely absent with the cool, light, and even running ball bearing spindles.

By the application of ball bearing twister spindles to old frames, it is possible to bring the band drive type

a conservative estimate would be 15 per cent saving of the total power consumed by the frame.

For example, take the actual conditions as reported by a well-known mill producing tire duck, which has had in constant operation for a period equivalent to more than six years S K F Ball Bearing Twister Spindles. There are 132 spindle frames, 4½-in. rings, 2½-in. whorl, spindle speed 2,700 r. p. m. running 11-ply No. 23's yarn. Both ball bearing and plain bearing spindles are driven by 1¼-in. tape. The drive and frames (other than spindles) are

ty years.

The cost of an S K F Ball Bearing Twister Spindle is approximately 50 to 85 per cent greater than that of a plain bearing spindle of equal size; but considering one feature alone, i. e., power saving, it has been proved that the added investment will yield a return of at least 20 per cent annually, or over 400 per cent during the life of the spindle. This does not take into account the very essential feature of improved quality of product, as previously mentioned. Also, the saving in oil and maintenance charges are additional items of importance in favor of the ball bearing spindle.

As a concrete example of the financial advantage of ball bearing twister spindle, first, take the total power used by the twister frames; multiply by the power cost per year, then figure 15 per cent of this total, as net saving, or the approximate amount of money being wasted annually by plain bearing type spindles. Multiply this amount (savings) by five and the result will be the average cost to equip frames with S K F Ball Bearing Twister Spindles. As an illustration: Assume 150 Twister spindles under present conditions require 10 h. p.; 3,000 spindles require 200 horsepower; at \$30 per horsepower per year, the power bill is \$6,000. Fifteen per cent of this, \$900 net saving annually by the use of ball bearing spindles. Five times this or \$4,500 will be the approximate additional cost of 3,000 ball bearing twister spindles. These figures are believed to be conservative and in

many cases the extra investment will be returned in much less than five years, with the substantial factor that the mill, during all this time will be producing a more uniform and higher grade of product, marketable at a greater profit.

Requisites of Ball Bearing Spindles.

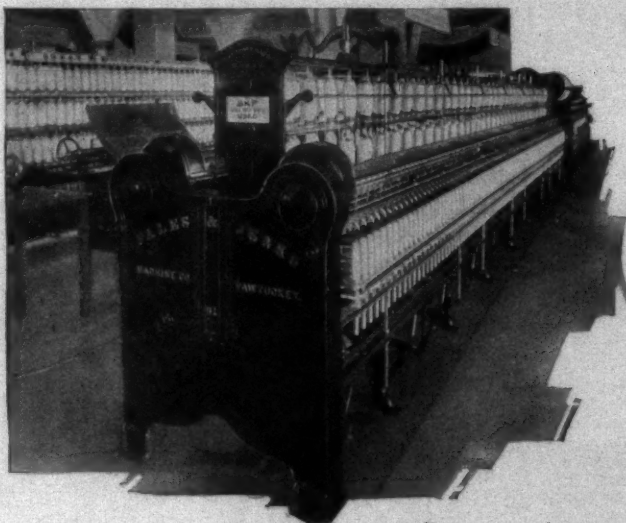
A mechanically durable and commercial practical ball bearing spindle demands:

1. Proper type ball bearing.
2. Simplicity of construction.
3. Oil retaining features.
4. Disassembling or cleaning features.

The ball bearing must be accurately made to withstand the wear due to high spindle speeds and it must be self-aligning to permit of proper spindle play. The illustrations show the design of two types of successful ball bearing spindles. A very important feature is the position of the ball bearing relative to the whorl, which tends to balance the pull and relieve the step bearing of practically all side strains. This means that the spindle blade should, with proper care, lubrication and cleaning last indefinitely, as the ball bearing can if necessary be replaced without harming any part of the complete spindle.

Ball bearing spindles should be oiled with a light grade of good machine oil, and the amount of oil used is about one-half that used on plain bearing spindles.

These ball bearing spindles can be taken out of the bolster and the base for inspection and cleaning in the same manner as plain spindles. (Continued on page 11.)



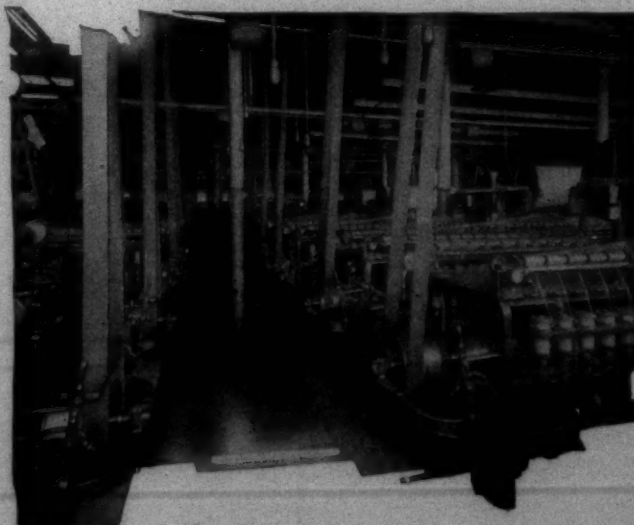
Fales & Jenks Machine Co. Tape Drive Spinning Frame, Using S K F Ball Bearings.

of frames up to modern efficiency identical and are operating under and to a point where they can compete successfully with new tape drive frames, putting both types of drive on a par in efficiency and in reliability of twist. This means that instead of discarding old frames or attempting the costly change to tape drive, improved and increased production may be gained at the only expense of new ball bearing spindles, which are made to exactly replace old twister spindles without change of rail, bobbin or drive.

The prime advantage of using ball bearing twister spindles is the power saving. Tests have been made on spindles alone and records of 30 to 33 per cent power saving were shown. Under operating conditions the ball bearings was found to be in the mill, because of the friction losses, through the entire frame, the total savings net 12 to 18 per cent. Spinning and twisting conditions vary so widely, however, due to traveler top roll weight, speed, twist, etc., that power savings from ball bearing spindles will also vary; but

best of care, so that the comparison of power consumption was made under ideal conditions and the results authentic. An average of the different tests showed a saving of 1.1 h. p. per frame in favor of the ball bearing spindles.

This power saving figured at \$25 per h. p. of 3,000 hours per year, nets a saving on a 6,000 hour year, of \$55 per frame annually to the mill. In other words, on account of twenty-four-hour-a-day service, the initial cost of these ball bearing spindles has been returned inside of two and one-half years of operation. These spindles were carefully examined recently and the wear on the ball bearings was found to be practically nil. Not one adjustment or replacement has ever been made in this application, which proves the reliability of this type of ball bearing twister spindle. From these indications, it would appear that the life of this heavy type, ball bearing spindle would not be less than twenty



Spinning Frames Equipped With S K F and J Ball Bearing Twister Spindles.

What Ball Bearings Mean to Cotton Machinery.

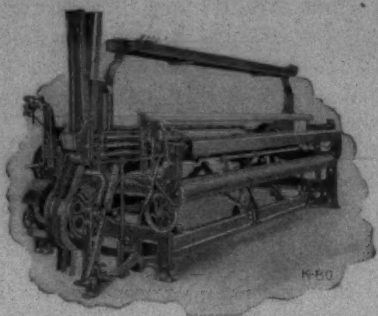
(Continued from page 10.)

In the ball bearing spindle, ample provision against throwing of oil is provided; also there is a simple, thorough method of circulating the lubricant over the ball bearing in the holster, which makes a cleanly spindle without oily fly collecting.

Cylinder Slashers.

The adoption of ball bearings on cylinder slashers is similar to their use on the large drying cylinder in the paper trade. To textile men the conditions to be found where cylinder slashers are equipped with trunnion bearings are well known. After the cylinder (which weighs over 2,000 pounds) has been used for some time the trunnions wear down, the journals become grooved and sometimes the cylinders cease to revolve. The tension on the warp is naturally increased, and the slasher tender must be particularly careful to start the slashers slowly, which cuts down the production of the machine.

The use of S K F Ball Bearings is highly advisable for slasher cylinders, being easily started from rest, and the tension on the warp is decidedly reduced, thus a saving in power, and increased production makes the adoption of ball bearings



Cotton Loom With S K F Ball Bearing Equipped Crank, Cam and Drive Shafts.

oil chambers against leakage of oil and the entrance of line or grit into the bearing. This means the elimination of oil stained goods and seconds.

A bad fitting crank shaft bearing is the source of most lubrication trouble, and if the bearing can be made more accurate and the bearing housings sealed against leakage we have solved the features usually so difficult to remedy. It is here that the ruggedness of S K F double row self-aligning ball bearings have demonstrated their superior features.

S K F Ball Bearing equipment permits of practically instantaneous starting of the loom (one-third sec-

ducing the starting torque of the power may conserve their consumption by the use of ball bearings, and thereby a greater production may be

Summary.

In general, the value of ball bearing for textile mills is the efficiency developed; i. e., ball bearings have helped to make textile machinery and appliances faster and better producers or greater earners.

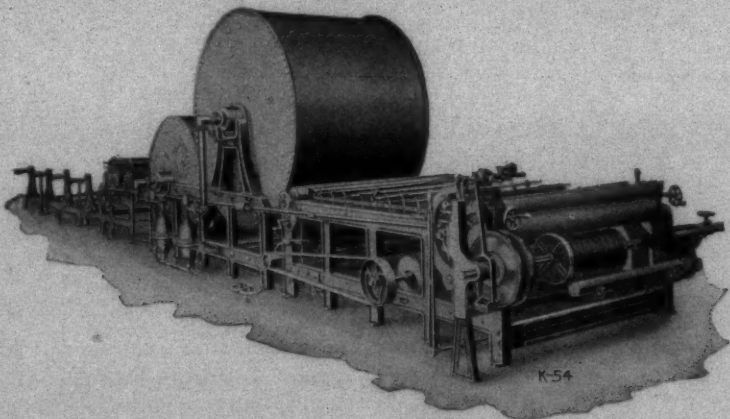
This increased efficiency includes: (a) power savings; (b) economies in equipment, in maintenance, in lubrication and attendance; (c) advantages in production.

Mills operated by steam or electric power can save on their coal or current bills by using ball bearing machinery—"Power is money."

Mills operated by cheap water

power may conserve their consumption by the use of ball bearings, and thereby a greater production may be obtained from oftentimes limited water supply; that is, ball bearing equipped machinery and appliances average a 15 per cent saving in power consumption; therefore, more equipment can be operated by the available water power.

Ball bearings help to produce steadier running machinery which allows higher speeds to be maintained; increased production is obtained. Steadier running also helps to produce a more uniform and better product; that is especially true with preparing and spinning machinery.



Saco-Lowell Cylinder Slasher Equipped With S K F Ball Bearings.

profitable. Tests indicate that to start the cylinder from rest when the slasher cylinder is equipped with trunnion bearings requires from 7½ to 20 pounds, depending upon the conditions of the bearings. When, however, the cylinders are mounted on S K F Ball Bearings (which are protected from the intrusion of water and dirt) it requires 4 to 7 lb., a very decided saving.

The fact that rolling is substituted for rubbing friction in the bearing minimizes the friction and insures long life of the bearings.

Winders.

The package spindles of ball bearing winders of recent design are mounted on two small bearings which are completely enclosed in leak-proof housings. The particular features of ball bearing durability, freedom from frequent lubrication and attention, cool running and absolute cleanliness, make this a decidedly advantageous ball bearing application.

Looms.

Ball bearings on looms mean not only a saving in power required to drive the machine but also a saving in oil. The bearing housings seal the

end or less) and precludes the possibility of the shuttle sticking. The starting feature is especially valuable on broad looms, since every "smash" that is avoided, due to the easy starting of ball bearings, saves not only yards of goods, but also the delay and non-production of the loom.

Ball thrust bearings used at the friction clutch are fast superseding fibre washers which collect lint and dust and wear rapidly.

S K F Ball Bearings on crank, cam and drum shafts have been used very successfully. One installation which was made four years ago is still in operation without adjustment or repair having been required, and the power tests have shown a saving of over 30 per cent.

A large loom builder has demonstrated successfully on his broadloom the use of a belt one-half as wide as is used on regular plain bearing looms; therefore, on a large weave loom equipment, the savings in belting and motive power will amount to a very considerable item. On direct connected motor looms, S. K. F. Ball Bearings have helped solve the starting difficulty by re-

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SOUTHERN TEXTILE BULLETIN

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THURSDAY, FEBRUARY 28, 1918

Seven Years Old.

With this issue the Southern Textile Bulletin reaches the end of the seventh year of its existence, having begun publication on March 2nd, 1911.

Entering a field which was said to be overcrowded with textile publications at that time, the Southern Textile Bulletin, with the idea that there is "always room at the top" quickly made a place for itself and became the leading textile journal of the South.

Knowing that conditions in the textile fields of the North and the South are radically different and that no publication could be a real factor in both fields, the Southern Textile Bulletin devoted itself exclusively to the textile industry of the South and has become a predominant factor in this field.

The strength of the Southern Textile Bulletin lies in the fact that it has always fought and worked in the interest of the cotton mills of the South and has defended the mills against the gross misrepresentation of their energies, but at the same time has hesitated to condemn evils that existed.

From every standpoint the Southern Textile Bulletin has been a success during its first seven years and it expects to become an even greater factor in this field in the years to come.

Government Gauze Orders.

The Government is very badly in need of gauze for bandages and is trying to get all of the goods they need from Fall River, Mass.

At a conference in Washington last week it was suggested that Southern mills be given the business, but the reply that Southern mills did not have the necessary reeds and harness and could not make the desired constructions.

The following are the several constructions desired:

38½ inch 44x40—	8.20 yards.
36 inch 32x28—43	yards.
36 inch 38x24—45	yards.
36 inch 24x20—47	yards.
36 inch 22x18—49	yards.
36 inch 20x16—21	yards.

We understand that the yarn used in all of these constructions are 28's to 30's warp and 45's filling.

We know that these goods can be made in the South and that many mills have for years made tobacco or "bug" cloth, which is very similar except made of coarser yarns.

It seems to us that the Government could in this emergency come nearer securing the necessary output from the automatic looms of the South than from the plain looms of Fall River.

It also seems to us absurd that the Quartermaster Department should seek six different kinds of gauze when two constructions would probably answer all purposes.

They should follow the example of the French Government and of them or their parents came, are standardize their cloth requirement. all in favor of their being fighters.

The French now have contracts with Southern mills for millions of yards of 64x64—2.40 cretonne and use that piece of goods for many purposes for which they formerly purchased goods of special construction.

They have found that they could obtain much better results from "standardized" goods than from a wide variety.

We believe that in a short time the United States will "standardize" their cloth requirements and eliminate a great deal of the present confusion.

Mill Boy Was First to Be Mentioned for Bravery.

Let McKelway and Lovejoy and all of their tribe take note.

John F. Arrowood, a cotton mill boy from the Mollohon Mfg. Co., at Newberry, S. C., was, according to press dispatches, the first American to be especially mentioned by General Pershing for bravery on the fields of France.

John F. Arrowood is about 27 years of age and was raised by his



John F. Arrowood.

uncle, A. Arrowood, of the Mollohon Mill village.

We have not the details of the act for which he was so highly commended but he proved to the world at the very beginning that the cotton mill boys have stamina and bravery and can be counted upon to do their part in this great struggle.

There is no better blood in the world than that which flows in the veins of the cotton mill people of the South and we predict that many of them will be heard from before this war is over.

The history of the race from which they sprang and the traditions

It is our prediction that there will be found to be fewer cowards and fewer yellow streaks among the soldiers from the Southern cotton mills than from any other class of men who have entered the army.

Dr. McKelway and Owen Lovejoy and their gang of professional agitators have proclaimed throughout this land that the cotton mill boys were weaklings and degenerates, but the mill boy in the army will show the world what manner of men they are.

Owen Lovejoy has already showed his disloyalty in public utterances, while John F. Arrowood, a cotton mill boy, in contrast, has received the highest commendation for risking his life for his country.

We are proud that John Arrowood came from the industry with which we are connected.

Amoskeag Man in Important Government Position.

Superintendent William Parker Straw, of the Amoskeag Manufacturing Co., Manchester, N. H., is now in Washington with the War Industries Board.

Major Straw will be connected with the cotton goods department and it will be his duty to look after the production delivery of all cotton goods being made for the government in the war work. This includes cotton cloth for uniforms, leggings, tentage, in fact for whatever purpose it is to be used. The department will be established by him and when it gets into full swing, will carry on an immense amount of business for the government is letting contracts to a great many mills for supplies.

Say Government Is Seeking Osnaburgs.

There was much interest in the report that the Government was in the market for a large quantity of osnaburgs. It was evident, judging from the comment heard in several quarters that the Washington officials were actually seeking large quantities, though no one knew just what the yardage wanted would be. According to one party, the government was experimenting and really was not sure of what it wanted. Originally, the plan was to use some sort of sheeting for the camouflage work, on which painting was to be done. However, it was later determined to try the osnaburgs because they were cheaper. In reply to the answer that drills might do for the purpose wanted, it was stated that these were being used for other needs.

The general opinion is that the government will have considerable difficulty in getting all of the osnaburgs it wants, if it is looking for many million yards, as is reported. — Daily Trade News.

Personal News

J. G. Her has resigned as master mechanic for the Lynchburg (Va.) Cotton Mills.

T. L. Saunders, Jr., has resigned as superintendent of the Alpine Mills, Morganton, N. C.

W. G. Varnadore has resigned as spinning overseer at Fulton Bag Mills No. 2, Atlanta, Ga.

Richard Green is the new night second hand in carding at Elm City Cotton Mills, LaGrange, Ga.

E. E. Bishop has resigned as weaver at Dacotah Mills, Lexington, N. C., to engage in farming.

D. L. Kelly, from Bennettsville, S. C., has accepted a position as overseer of carding at Darby, Pa.

John Head has been promoted from second hand to overseer carding at Union Mills, Lafayette, Ga.

M. C. Phillips of Brookford, N. C., has accepted the position of weaver at Dacotah Mills, Lexington, N. C.

F. J. Reynolds, formerly overseer of spinning at Siluria, Ala., is now superintendent at Meridian, Miss.

G. A. Lay of Marshall, N. C., has accepted the position of carder and spinner at the Ranlo Mfg. Co.

C. D. Brooks, of Liberty, S. C., has accepted position as overseer of spinning at the Seneca (S. C.) Mills.

Mr. and Mrs. Fuller E. Callaway of LaGrange, Ga., have returned home after an extended visit to California.

John May, overseer of spinning, winding and twisting at the Hopedale Mills, Burlington, N. C., has resigned.

W. D. Sparks, of the Elm City Cotton Mills, LaGrange, Ga., has been promoted from night to day overseer of carding.

R. M. Queen of Highland Park Mill No. 3, Charlotte, N. C., is second hand in card room, Dacotah Mills, Lexington, N. C.

O. A. Brower has been promoted from overseer of spinning to superintendent of the Wadesboro (N. C.) Cotton Mills.

W. E. Morton of Burlington, N. C., has accepted position as overseer of carding and spinning at the Cannon Mills, York, S. C.

Lee Connor has been promoted from night second hand to overseer of carding in the Elm City Cotton Mills, LaGrange, Ga.

J. R. Roberts has given up his position as overseer in the cloth room of the Fountain Inn (S. C.) Mfg. Co. to run a cafe at that place.

D. W. Andrews, formerly of South Greenwood, S. C., is the new second hand in carding and combing in Green River Mill, Tuxedo, N. C.

E. F. Childress, formerly with Enoree (S. C.) Mills, has accepted a position as cloth room overseer at the Fountain Inn (S. C.) Mfg. Co.

J. E. Wicker, formerly superintendent of the Sterling Mills, Franklinton, N. C., is now superintendent of the Puritan Mills, Fayetteville, N. C.

S. T. Petty, formerly overseer in Carr Hosiery Mill No. 6, at Durham, N. C., has been promoted to superintendent of Mill No. 4, at Carrboro, N. C.

W. N. Darby has resigned as superintendent of the Capitola Mills, Marshall, N. C., to accept a similar position with the Alpine Mills, Morganton, N. C.

W. H. Still has resigned as overseer of carding at the Calvine Mills No. 3, Charlotte, N. C., to become superintendent of the Capitola Mills, Marshall, N. C.

T. B. Murphy, from Dallas, Texas, has accepted a position with Corsicana (Texas) Cotton Mills, which will install at once 150 Draper looms for heavy duck.

R. B. Hunt has resigned as carder and spinner at the Aldora Mills, Barnesville, Ga., and accepted position as spinner at Fulton Bag and Paper Mills No. 2, Atlanta, Ga.

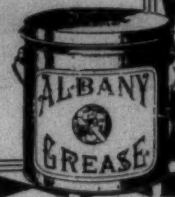
G. G. Boone, who for some time has been overseer of weaving at Osage Mill, Bessemer City, has returned to Kings Mountain, where he was overseer of weaving for several years at Dilling Mill.

ALBANY GREASE

has just rounded out a half century of usefulness. Its incomparable record of lubrication service during the past 50 years stamps it as a most efficient and economical lubricant. It can be used on engines, motors, line shafting, looms, twisters, spinners, etc., with highly satisfactory results. Write for samples.

ALBANY LUBRICATING CO.

708-10 Washington St., New York



W. H. Still has resigned as carder at the Chadwick-Hoskins Mill No. 4 to become superintendent of the Capitola Mill, Marshall, N. C.

J. A. Adams has resigned as superintendent of the Eureka Mills, Chester, S. C., to accept a similar position with Atlas Mfg. Co. and Huss Mfg. Co., Bessemer City, N. C.

L. S. McAllister has resigned as master mechanic at the Imperial Cotton Mills, Eatonton, Ga., to accept a position with the Schofield Iron Works, Macon, Ga.

R. P. Gosset has resigned as overseer of spinning at Whitmire, S. C., and accepted a similar position with Fairmont Manufacturing Company, near Spartanburg, S. C.

J. H. Dixon, formerly overseer of carding at night at Patterson Mills, Roanoke Rapids, N. C., has accepted a position as superintendent of Weldon (N. C.) Mfg. Co.

T. E. Liles has left Cheraw, S. C., and gone to Winnsboro, S. C., to accept a position as second hand in spinning, spooling and warping at Winnsboro Cotton Mill.

E. S. Draper, landscape architect and city planner, has been retained by the Erlanger Cotton Mills, Lexington, N. C., as consulting landscape architect. Extensive developments are planned.

J. J. Edwards has resigned as superintendent and paymaster at the Taylor Mills of the Bibb Mfg. Co. at Reynolds, Ga., and has accepted a position with the Dixie Mills, LaGrange, Ga.

H. M. Deason resigned his position as second hand in night spinning at Eva Jane Mills, Sylacauga, Ala., instead of overseer as reported last week to become second hand in spinning and spooling at the Osprey Mills, Porterdale, Ga.

H. D. Martin has resigned as superintendent and agent of the Selma (Ala.) Mfg. Co. to accept a position in New England.

A. Ferguson McIntyre has accepted the position of superintendent and agent at the Selma (Ala.) Mfg. Co.

F. E. Harper of Albemarle, N. C., has accepted the position of master mechanic at the Hamilton-Carhartt Cotton Mills, Rock Hill, S. C.

Wm. McCloud has been promoted from assistant superintendent to superintendent of the Lockmore Mills, York, S. C.

J. E. Johnson has resigned as superintendent of the Lockmore Mills, York, S. C., and will devote all of his time to the Travora and Neely Mills.

F. W. Gurry has resigned as superintendent of the Graniteville S. C.) Mfg. Co. to accept a similar position at the Maginnis Cotton Mills, New Orleans.

D. C. Barnett, of Kankakee, Ill., resigned his position with the New York Central railway, and is now second hand in carding for the Indianapolis Bleaching Company, Indianapolis, Ind.

Fulton Cotton Mill Co.

Athens, Ala.

J. F. Lehman.....Superintendent
Joe Terry.....Carder
H. H. Holcomb.....Spinner
A. E. Ray.....Master Mechanic

Greenville Cotton Mill.

Greenville, S. C.

W. H. Norris....Manager and Supt.
G. W. Brigman.....Asst. Supt.
J. J. Huffstickler.....Carder
O. L. Yarborough.....Spinner
C. G. Freeman.....C. E. and M. M.

We Manufacture Sulphur Khaki, Sulphur Olive Drab, Benzi Brown RHB, Benzi Fast Yellow A, Benzi Sky Blue Benzi Green FFG.

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80 FIFTH AVENUE, NEW YORK

MILL NEWS ITEMS OF INTEREST

Gastonia, N. C.—Gaston Cotton Manufacturing Co. will increase capitalization from \$200,000 to \$500,000.

Corsicana, Texas.—The Corsicana Cotton Mills will install at once 150 Draper looms for weaving heavy duck.

Gastonia, N. C.—The contract for the motors for the new Myrtle Mills was placed last week with the Westinghouse Electric & Machine Co.

Anderson, S. C.—The Anderson Hosiery Mills, of Anderson, has been chartered with a capital of \$25,000. The officers are: President and treasurer, R. H. Coney; secretary, C. Gadsden Sayre.

Athens, Ala.—The Fulton Cotton Mills are installing four gangs of Universal winders and are also installing two 100-spindle Foster comb and tube winders. They are also making improvements in their tenement houses.

Spartanburg, S. C.—The Saxon Mills and Spartan Mills will be changed from steam to electric drive at an early date. Contract for motors for both mills were placed last week with the General Electric Co., of Schenectady, N. Y.

Newberry, S. C.—The Oakland Mill village houses are now enjoying the comforts of the electric light system. Mr. John C. Goggans and his force having just completed the work there.

Long Shoals, N. C.—D. H. Mauney, superintendent and manager of the Long Shoals Cotton Mill, is considering the erection of a mill at this place which will either be an addition to the Long Shoals Cotton Mill or a new corporation.

Knoxville, Tenn.—The Knoxville Knitting Mills Co., is installing new machinery for the manufacture of high-grade women's mock seam hosiery. This is a new line for the company, and initial deliveries on contracts already taken are expected to be made in June.

Lexington, N. C.—The Erlanger Cotton Mills are planning extensive developments and improvements of their village. Several new recreational features are to be added. E. S. Draper, landscape architect and city planner, of Charlotte, has been retained as their consulting landscape architect.

Knoxville, Tenn.—Ashe Hosiery Mills are planning to increase daily capacity from 600 to 1,000 dozen pairs of hose and to effect this will install additional new machinery. This company has increased capital stock from \$25,000 to \$100,000. The plant is a new one, having been in operation only since last October.

Cherryville, N. C.—Another new knitting mill is to be started up here and will probably be in operation about the first of March. D. R. Mauney is the proprietor of the new enterprise, which is to be known as the Josephine Knitting Mills. There will be an initial equipment of 20 knitting machines, and men's half hose will be the product. Hosiery yarns, 18s to 30s, single, are to be used. The company has not been incorporated yet.

Hickory, N. C.—The Hickory Hosiery Mills, Inc., are having plans drawn for an addition to their plant, to be 100x50 feet, and two stories high. Sufficient new machinery will be installed in this addition to give a

daily output of 200 dozen of women's 176 and 200 needle seamless hosiery, increasing the plant's total production about 25 per cent. Construction work will be started immediately upon completion of the plans. At the annual meeting, which was held in January, a change was effected in the organization and the following officers were elected: H. D. Anna, president, secretary and manager; H. A. Sacks of the firm of Daisy Whitehead Knitting Co., 94 Leonard street, first vice-president, C. C. Bost, Hickory, second vice-president, and R. M. Bumgarner, also of Hickory, treasurer.

Chattanooga, Tenn.—Application has been filed for a charter of incorporation by Davis Bros., Inc., which

is the name of a new concern that will start a hosiery mill here. The plant will be capitalized at \$25,000 and will manufacture a high grade of ladies' and misses' hosiery. The initial equipment will consist of 50 Scott & Williams 200-needle automatic knitting machines. The officers of the company are J. C. Davis, president; O. M. Davis, vice-president, and L. C. Davis, secretary and treasurer. J. C. Davis will be active manager and is now in New York for the purpose of buying equipment. A building has been leased at 107 East Main street, and as soon as the machinery can be secured and set up operations will begin. J. C. Davis was until recently connected with the firm of W. B. Davis & Son of Fort Payne, Ala., and is an experienced man in the hosiery business. They will dye, bleach and finish their product. The plant will probably be ready for operations about April 1.

Chattanooga.—A change in the ownership of the Nick-a-Jack Hosiery Mills has been announced, all plants of the company having been sold to C. E. Buck, J. H. Wilson, Garnett Andrews and Dr. C. R. Hyde, who have acquired the greater part of the Nick-a-Jack stock, which controls the local and Alabama mills. The closing of the deal and the announcement of the sale was made by T. Walter Fred, formerly secretary-treasurer and general manager. Mr. Fred disposed of his holdings and severs his connection preliminary to entering the military service.

Dr. Hyde was president of the corporation before its transfer to the new owners, and will continue his connection with it.

The company is capitalized at \$100,000 and operates three mills, two in Chattanooga and one at Decatur, Ala. It has grown in three years until now it operates several hundred knitting machines and employs over 200 operatives.

Mr. Fred announces that the sale is not to be construed as a merger with other mills, but will be operated as an entirely separate proposition.

Mill Men Killed in Wreck.

In a Southern Railway wreck near Columbia, S. C., on Monday the following mill men were killed:

H. L. Ivester, Ware Shoals. Identified by traveling card from Ware Shoals Masonic Lodge No. 306.

Joe F. Moats, Mollohon Mill, Newberry. Identified by letter addressed to him in care of Walter Cromer, Parker street, Newberry, and marks on clothing.

Badly injured:

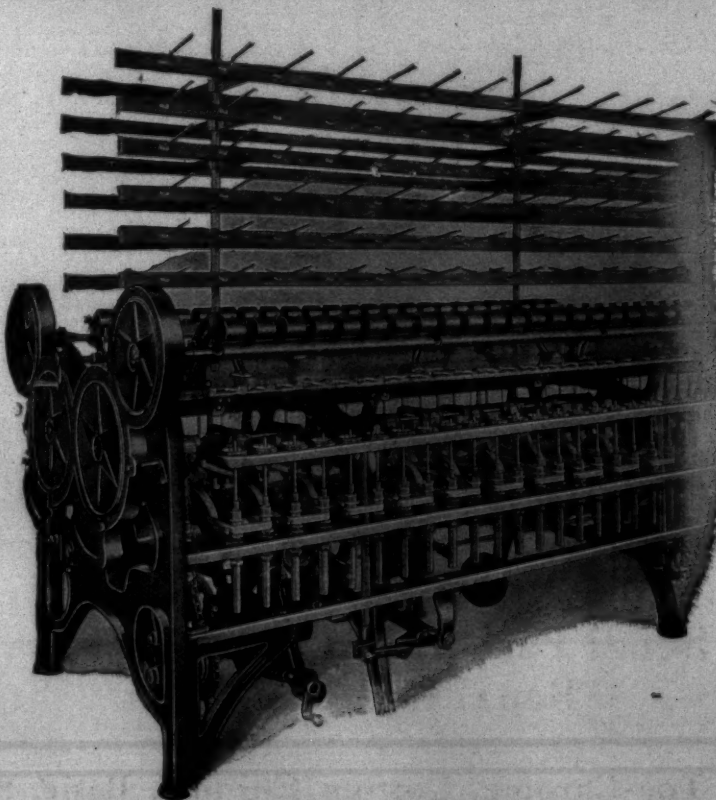
W. S. Bonner, 35, cotton mill inspector, 1622 Pendleton street, Columbia, bruised about shoulder and both hips.

E. S. DRAPER

Landscape Architect and City Planner
506 Trust Building, Charlotte, N. C.

PROFESSIONAL SERVICE IN

- Laying out New Mill Villages
- Improving Old Mill Villages
- Beautifying Mill Grounds and Mill Villages



TAPE-DRIVEN TWISTERS

Save 50 per cent. operative power
Produce more even yarn.

COLLINS BROTHERS MACHINE COMPANY

PAWTUCKET, R. I.

Southern Agent, FRED H. WHITE, Charlotte, N. C.

Goods to Bear Imprint "Made in U. S. A."

Washington.—A bill providing that an imprint shall be placed on all articles manufactured in the United States and becoming the subject of interstate commerce, and prohibiting the importation of manufactured articles or goods unless bearing an imprint, has been introduced into the House of Representatives by Congressman Garland, of Pennsylvania.

The measure provides that on and after July 4, next, every article manufactured in this country and transported in interstate commerce must bear the imprint "Made in U. S. A.," and that it shall be illegal to sell or dispose of any article which does not bear such an imprint. Beginning with that date, also, no manufactured article shall be permitted to enter the country from any other country unless it bears an imprint stating the name of the country in which it was manufactured. Any manufactured article arriving here which does not bear the necessary imprint shall be refused entry and returned to the consignor at his own expense. All imprints provided for in the measure must be in type of a size not less than six point.

Any person or corporation who violates that section of the act relating to the imprinting of articles manufactured in this country and becoming the subject of interstate commerce will be liable to a penalty of \$100 for each and every article sold in contravention to the act.

Traveling Facilities and Expenses in South America.

The consulate is in receipt of an inquiry from an American firm relative to the transportation facilities between Uruguay and contiguous territory.

In addition to a weekly steamer service maintained by a Brazilian company between Montevideo and Rio de Janeiro and intermediate Brazilian ports, the steamers of several British and other European lines call as a rule at Rio de Janeiro, Santos, and Montevideo on their way to and from Europe or the United States.

There is a daily steamer service between Montevideo and Buenos Aires, the trip taking but one night. The fare on these river steamers to Buenos Aires varies, but 8 pesos (\$8.27) would be about an average.

Traveling men usually stop first at Bahia, Brazil, about six days from Rio de Janeiro. From Rio they work Sao Paulo and Santos and sail from the latter port to Montevideo; a three-days' trip. The journey from

Sao Paulo or Santos to Montevideo can also be made by rail.

Traveling men who have visited this territory for the last five years state that it costs them \$500 per month to travel in South America. This includes all expenses.

In Uruguay, Montevideo is by far the leading port of entry for all goods and the purchasing center of the country. Owing to the proximity, a representative in Buenos Aires has good facilities for working the Montevideo market, and where the demand is limited a single agency located at Buenos Aires may prove advantageous. — Commerce Reports.

Industrial Training in England.

The raising of the school age to 16 (15 in the case of the engineering trades) is characterized as "the first essential in any scheme for future technical education and industrial training" in the reports of the departmental committees appointed by the British Government to inquire into the position of certain branches of industry. These committees comprised one for the iron and steel trades, one for the engineering and marine engineering trades, and one for the textile trades. "Their recommendation is by no means new," says the official Board of Trade Journal in its January 10 issue, and continues:

This raising of the school age will inevitably interfere with the present social and industrial order, but the committees believe that the

change can better be borne now than in normal times by both the heads of working-class families and by employers. That is, a balance must be found in the first year of the change between the claim of education and the pressure of economic situation. The committee of the iron and steel trades declare that it is possible to draw a broad distinction between higher technical or scientific education and the industrial training of workmen. Technical education means the combined training of the mind and body in a special direction. The habits of mental discipline, which it is the purpose of early education to form, are gradually focussed upon a particular range of knowledge, and it is important that there should be no break in the process. The committees report broadly:

"The present system of technical education is rather a method of selection than a process of education, and for the greater part the existing system suffers from the defect of discontinuity. Between the age of 14, when a boy leaves the elementary school, and the age of 16, when he normally enters the works, there is a great gulf fixed. From an educational standpoint these two years are worse than useless, since it may well be that discipline of the mind becomes seriously enfeebled if not temporarily destroyed."

The committees recommend that the limit of the school age should be raised from 14 to 16 years, and that during these two years instruction

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Cars, Boxes, Barrels and Superior Mill Receptacles sold by Southern Mill Supply Houses.

Write us direct for newest catalog.

Rogers Fibre Company
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MORSE SILENT CHAINS

Efficient—Durable

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Southern Agent
Geo. W. Pritchett Greensboro, N. C.

of a general scientific character should form the dominant portion of the curriculum, at first general and elementary, including chemistry, physics, and mathematics, and then in the special direction dictated by the prevailing local industry. The problems of the economic disturbance and the financial loss to the family budget which this course will cause must be solved. Boys may only be partially withdrawn from work at the inception of the scheme, and "boys who are apprenticed under indenture in the trade will attend school until 16 years of age, and the employer should contribute a small apprenticeship wage of about 5s (\$1.25) per week."

A separate set of recommendations was put forward by each committee, but in a general way they all follow the lines indicated above.—Commerce Reports.

DURING THESE STRENUOUS TIMES

We must conserve. Why not do your share by economizing?

Begin by making your labor more efficient. The first step "Provide Sanitary Conditions in Your Water Drinking System." Install the

Puro Sanitary Drinking Fountain

Why?

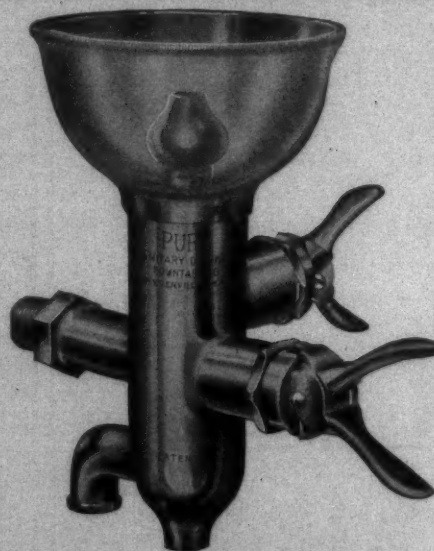
BECAUSE It promotes health
It prevents spread of disease
It saves water
It SAVES TIME

ADDED RESULT—EFFICIENCY

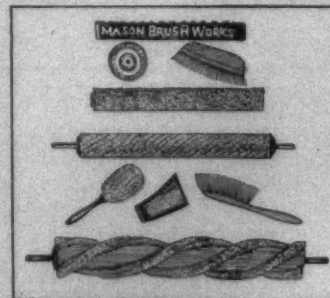
Investigate our proposition. A postal will bring full information.

Puro Sanitary Drinking Fountain Co.

342 Main St., Haydenville, Mass.



All kinds of MILL BRUSHES



MASON BRUSH WORKS
Worcester, Mass.

AMERICAN MOISTENING COMPANY

BOSTON, MASSACHUSETTS

WILLIAM FIRTH, President

FRANK B. COMINS, Vice-Pres. and Treas.

THE ONLY PERFECT SYSTEM OF AIR MOISTENING

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Cotton Piece-Goods Trade in Hongkong.

Hongkong import houses have been able to stand firm during the past year in the no-credit system of dealing with Chinese jobbers, which was established soon after the elimination of German houses from the Hongkong field by the war. During the earlier part of 1917 there was some trouble with Chinese buyers over new terms of clearance of goods established by the importers through the Hongkong General Chamber of Commerce, but when buyers found that the terms and conditions were meant to be permanent, they were finally accepted. The result has been that while the volume of business in cotton-goods imports has been only a fraction of the normal imports, because of general war and financial conditions, the year's trading has been reasonably profitable, and the piece-goods business as a whole is in a good condition to handle a large volume of trade as soon as normal conditions have been re-established.

As a matter of fact, the piece-goods trade of the Hongkong field, and more or less in China generally during the past year, has been saved only by the high exchange value of silver. Prices of all goods in Great Britain and the United States have advanced to such a degree that at ordinary rates of exchange the price of goods in silver would have been entirely out of the reach of Chinese consumers and, with the facility the Chinese people always show in dealing with a situation of this sort, they would have done without foreign fabrics entirely and would have taken up more generally with native cloths woven from native yarns made from native as well as imported cotton yarns. This use of native cloth has been increased very materially during the present period of high prices.

The exchange value of silver ruled high during the whole of the year, however, and as cotton went up in price, the unusually high value of silver reached in August and September carried Chinese buying power along with it, for the increased price of cotton goods was more than counterbalanced by the increased buying power of silver. Nevertheless, the volume of trade at all times during the year has been small. Political disturbances in South China, particularly in August and September, prevented any expansion in trade, and then in a general way the buying power of the Chinese people has been very low, because of their inability to export their usual products in the usual way. Trade in the coast ports, like Swatow, Amoy, and Foochow, for these reasons has been dull. During the year the general effect of the war on the trade also became more and more apparent.

The lack of dyes affected very seriously the import trade in the shirtings which the native dyers import to dye Chinese style and sell as native goods, this industry being particularly strong at Swatow and along the lower Chinese coast.

Native-made cloth appeared in the local markets in greater amount,

and some nearby districts in China made a specialty of its production. Native-made cloth was also an important factor farther north, Shanghai making a special drive in that line. There was trouble with slow deliveries, due to war conditions, and, of course, war conditions and disturbed political conditions in South China caused a restriction of credits generally. The business done was satisfactory, considering the nature of the obstacles to be overcome.

During the year Hongkong developed a rather unique position as a distributing center for cotton goods usually obtained elsewhere. The year opened with ample stocks of piece goods on hand which, for reasons above given, were not promptly moved. As the price of cotton and cotton manufactures rose the goods on hand which, for reasons above given, were not promptly moved. As the price of cotton and cotton manufactures rose the goods held in Hongkong were to be had at prices far below replacing costs and the result was that the Philippines, Indo-China, the East Indies, North China, and other parts of the world drew on Hongkong for supplies which, under more favorable home conditions and prices, would have been bought directly of the manufacturers, and Hongkong became practically denuded of its stocks. Local prices then rose to a level corresponding to those of other markets and justified new orders at prevailing home prices. The year closed with small business being realized but with the prospect of very fair business in the near future if the political disturbances in South China are stopped.

The cotton piece goods business in Hongkong and South China can now be said to be entirely free of the German influence which has more or less dominated it for several years. Goods with German-owned trade-marks are off the market, all German business has been liquidated, and even dependence upon German dyes has disappeared. Japanese goods have been coming into the market in increased volume, while American goods also show a material increase. However, the trade is still overwhelmingly British and will remain so until American manufacturers make goods suitable to the South China market. Dealers report that the experimental imports of American piece goods made during the year have not been a success because they were not suited to the market. The rising value of silver enabled them to be sold without a loss, but dealers are not disposed to repeat orders. Japanese goods have included not only the staple grays and other cloths that have been typical of Japan's trade, but also a number of fancy goods new in their trade. The year closed with a rather better demand and improved outlook. Commerce Reports.

Doubtful.

An old negro woman, standing by the grave of her husband, shook her head and said mournfully: "Poor Rastus! I hope he's gone where I spec he ain't."

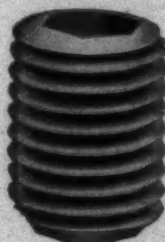
He Maims as Many Men as the Kaiser—

Old fashioned set screws have no place in the modern shop. Throw these little devils out of your plant.



Allen Safety Set Screws

Make Shops Safe for the Workers



They have no projecting heads and are flush with the surface when screwed into place. They put an end to all troubles of broken heads and drilling or chipping out mushroomed screws.

"Allen" Screws are made from high test steel bars. All sizes from 1/4 to 1 1/2 in. furnished.

We'll gladly send you free samples which you can put to any strength test you want—the test will convince you that while you may have seen screws that looked like Allen Screws, you have never seen any with their strength and pressure resisting qualities.

Write for Circular No. 10 and free samples.

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The rays of the sun are evenly defused and reflected where you paint the walls and ceilings of your mill with



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Peeslee Factrilite is an economical paint, because it is Washable, Durable, Germ and Moisture Proof. Saves the expense of frequent repainting.

We supervise the job at our expense.

Peaslee-Gaulbert Co.

Incorporated

Established 1867

LOUISVILLE, KY.



The Man of the Hour.

At the request of the United States Shipping Board we are publishing the above cut and wish to call the attention of our readers to the imperative need of skilled men.

Unless this country can build enough ships to carry our soldiers and supplies to France and to send our allies the necessary food stuffs our cause will be lost and yet the supply of men is far less than the number needed.

Ships are not things of mystery; they are merely big buildings afloat—the product of everyday skill and industry—and the American Mechanic can build them.

Two-thirds of the occupations used in shipbuilding are common to other industries, like boiler making, car building, bridge building, carpentering, machine shop work, etc.

If you possess the right sort of training now is the time to rally around this movement and wear a Badge of Honor. This button, issued by the United States Shipping Board, shows that the wearer, through enrollment in the United States Shipyard Volunteers, has placed the welfare of the Nation above all else and stands ready by his labor to help throw across the seas a bridge of ships by which the armies of the United States can pass to do their duty on the fields of France.

To wear this button is a sign of distinction. It truly stamps the owner as the **man of the hour** in whose hands rest the happiness and security of every man, woman and child in this country.

So highly does the Government think of your services that you are placed in a deferred class in the draft, as long as you are working on ships. The War Department, by arrangement with the Emergency Fleet Corporation, accepts shipyard work as a substitute for military service. That's how important Uncle Sam considers ship building and the men engaged in it.

This does not mean that you are to give up your regular job and rush off to some shipyard which at the moment, may not be able to accommodate you. Your enrollment simply shows that you stand ready, when called upon, to do a particular job for a particular wage in a particular place. Everything will be in readiness for you, and you will lose no time.

The following are a few of the many classes of men needed: Machinists and machine hands, all sorts, helpers, painters, acetylene and electrical welders, wiremen, plumbers and pipe fitters, carpenters, electrical workers, blacksmiths, electricians, cementers, laborers, all kinds.

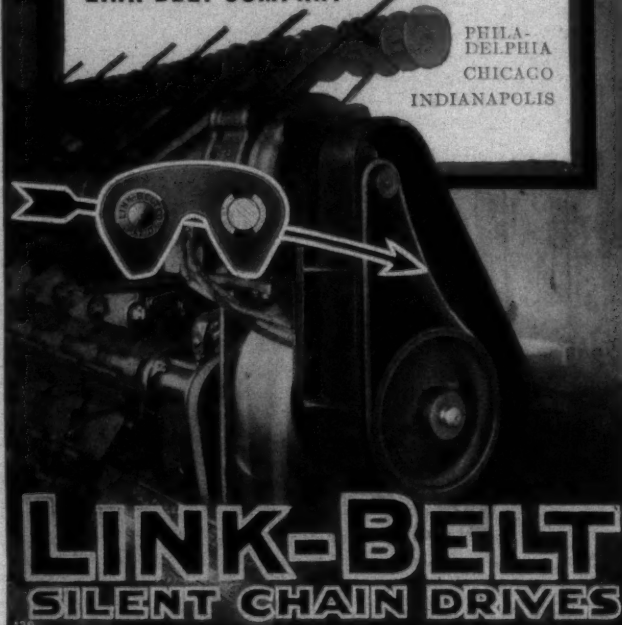
Those who wish further information can obtain same from the United States Shipping Board, Washington, D. C.

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Positive as a Gear—
More Efficient than Either**

Look at this smooth-running drive. Do you wonder why it is rapidly becoming the standard means of transmitting power in Textile Mills?
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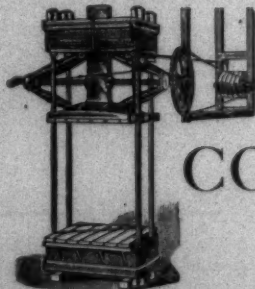
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COTTON MILLS

AS MADE BY

Boomer & Boschert Press Company

No. 104 WEST WATER ST.,
SYRACUSE, N. Y.

Send for Catalog.

Cotton Goods

New York.—Prices on all kinds of cotton goods have made decided advances during the past week, print cloths and sheetings gaining more than a cent a yard. The market has been ultra active all week, buyers' needs calling for a far greater preponderance of goods each day than could be supplied in a week and perhaps longer, the trade reports.

Government orders are large and other related war requirements continue to press upon the markets. Fears of scarcity in many lines of merchandise for civilian purposes have led to many attempts to place larger orders than mills can possibly accept, as they are closely sold till June on many goods and are unable to count upon a capacity output.

Southern mills received the greater part of the order placed during the week by the Government for 36,000,000 yards of hospital gauze and the price paid was said to be "over 71 cents." It will be remembered that, in the recent discussion between the mills and the Government, the Washington officials held that 71 cents was sufficient for government goods of this character. The mills held out for about 81 cents.

Ginghams are in such an enormous demand and suitable construction so scarce, that cutters-up are compelled to accept 25-inch stock which does not cut to advantage, resulting in a shameful waste. However, they say conditions compel them to take anything they can get; to pay the price, and be quick about it.

The absolutely wild manner in which print cloth prices have been advancing for the past few weeks has, unquestionably struck fear in the hearts of many. A number of buyers were reported to be making bids for business in November and December. However, there was said to be only a few sellers who were willing to consider orders for such distant dates. The general impression is that by holding out until a more reasonable date, the prices for the months in question will be somewhat higher than they are. This is in view of the fact that any business taken today would undoubtedly be at a price that would allow of a handsome profit.

Bleached goods are in active demand and print cloths and many sheetings lines are one cent a yard higher than a week ago. All colored fabrics, especially the heavier grades, such as denims, tickings, chevots, plaids, etc., are scarce for nearby shipment and prices continue to move upward without relation to cotton or other costs. Cotton duck for civilian purposes is becoming very scarce owing to the great requirements for government purposes.

Prices quoted are as follows: Print cloths, 28-inch 64x64s, 11 cents; 64x60s, 10½ cents; 38½-inch 64x64s, 14½ cents; brown sheetings, Southern standards, 21½ cents and 22

cents; denims, 220s, Southern indigo, 35 cents; tickings, 8-ounce, 37½ cents; prints, 13½ cents; staple ginghams, 18½ cents; dress ginghams, 22½ cents and 25 cents.

To Amoskeag Overseers and Foremen.

The Amoskeag Manufacturing Company's (Manchester, N. H.) safety committee sent a letter to the overseers and foremen in the plant, last week, showing how proper supervision over the employees will have a strong tendency to lessen the danger of accidents. It is as follows:

"Dear Sir:—The position of foreman in industrial accident prevention is enviable. No other man in an industrial organization is as well situated to control the accident record.

"Nearly all accidents are due to recklessness or ignorance. Therefore, accident prevention must come through supervision; and where can this supervision come from as easily, as logically, as forcefully and as efficiently as from the foreman?

"The foreman, or the man who has supervision over one or more of his fellow employees, knows when his men are working under conditions dangerous to themselves or to others. When any of his men perform an unsafe act he is the first to see it and correct it. His is truly a work of leadership and of guidance.

"He is not unlike the shepherd of old, whose duty it was to lead his flock, not only into pastures which were safe. The foreman's record is made up no more of what his men have done than how safely they have done it. His responsibility is great. Through his superior knowledge and experience it is natural that his men look up to him and depend upon him for their safety. What an opportunity is born of that trust!

"The foreman who takes advantage of it, who preaches, teaches, explains and insists that his men perform their work only in a safe way attains a record of which kings might be proud—the record that shows accomplishment without serious injury among his men.

"Yours very truly,
"Committee of Safety, Amoskeag Manufacturing Company."

"Some un sick at yo' house, Miss Carter?" inquired Lila. "Ah seed de doctah's kyar eroun dar yestidy."

"It was for my brother, Lila."
"Sho! What's he done got de matter of 'm?"

"Nobody seems to know what the disease is. He can eat an' sleep as well as ever, he slays out all day long on the veranda in the sun and seems as well as any one, but he can't do any work at all."

"He cain't—yo' says he cain't work?"

"Not a stroke."

"Law, Miss Carter, dat ain't no disease what yo' broth' got. Dat's a gif!"—Everybody's.

T. HOLT HAYWOOD DEPARTMENT

FRED'K VIETOR & ACHELIS

COMMISSION MERCHANTS

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New York

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Sterling Value
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Over 200 Representative Mills of the South are Equipped with Our Apparatus

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Completely Equipped Job Welding Shops at Atlanta and Charlotte
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MONOPOLE OIL

U. S. Patent No. 861,397

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A valuable and well known product.

In Dyeing cotton it gives penetration and evenness of color, together with brilliancy.

In Finishing it imparts the much appreciated "glove" feel.

JACQUES WOLF & CO.

Manufacturing Chemists and Importers

Passaic, N. J.

The Yarn Market

Philadelphia.—Every buyer and every seller of cotton yarn seems to have a different opinion as to the future of the market. Some dealers think that prices will increase 25 per cent and others say there will soon be a decline.

The fact that government work is the backbone today and that in some lines the contracts already let are sufficient to supply an army of more than 5,000,000 with clothing is being ignored. When war needs are supplied what will happen? Manufacturers say they cannot sell goods, in any volume, for civilian consumption of the basis of present yarn prices and when war needs are supplied there will be a period when machinery will be idle, not through scarcity of workers, but through inability to sell goods, until the cost of production is again brought down to a reasonable basis.

During the week there were very few large sales. Dealers reported the demand was almost wholly for spot or nearby delivery. Increased receipts of yarn on orders placed 10 or more weeks ago had some effect on prices of some numbers.

The increased receipts do not mean that freight congestion is over or that the end is in sight. Southern spinners write that they are unable to ship yarn from their shipping points unless to fill war orders.

It would seem that the freight question, that is who shall pay the freight, the spinner or the dealer, is practically settled and that the old order will continue.

Southern Single Skeins.

4s.....	—53	20s.....	—58
6s.....	—53½	22s.....	—58
8s.....	—54	24s.....	—58
10s.....	—54½	26s.....	—59
12s.....	—55½	30s.....	—60
14s.....	—55½	40s.....	—73
16s.....	—56		

Southern Two-Ply Skeins.

4s.....	—53	24s.....	—59
6s.....	—53½	26s.....	—60
8s.....	—54	30s.....	—60½
10s.....	—55	36s.....	—72
12s.....	—56	40s.....	—73
14s.....	—56½	50s.....	—1.00
16s.....	—57	60s.....	—1.00
20s.....	—57		

Southern Single Chain Warps.

8s.....	—54	22s.....	—57
10s.....	—54½	24s.....	—57
12s.....	—55	26s.....	—58
14s.....	—55	30s.....	—60
16s.....	—57	40s.....	—73
20s.....	—57		

Southern Two-Ply Chain Warps.

8s.....	—54	24s.....	—59
10s.....	—55	26s.....	—58½
12s.....	—56	30s.....	—61
14s.....	—57	40s.....	—74
16s.....	—58	50s.....	—1.05
20s.....	—59		

Southern Frame Spun Yarn on Cones

6s.....	—52	20s.....	—58
8s.....	—55½	22s.....	—58½
10s.....	—56	24s extra	—63
12s.....	—56½	26s.....	—63½
14s.....	—57	30s.....	—63½
16s.....	—57½	40s.....	—73½
18s.....	—57½	22s colors	—62

Carpet and Upholstery Yarn in Skeins

6-4 slack..	—46	8-3-4 hard	
6-4 slack..	—46	twist..	—50

A. M. Law & Co.

SPARTANBURG, S. C.
BROKERS

Dealers in Mill Stocks and other
Southern Securities.

Southern Cotton Mill Stocks

Abbeville Cotton Mills, S. C.	120	125
Amer. Spinning Co., S. C.	160	—
Anderson Cot. Mills, S. C., com.	40	—
Anderson Cot. Mills, S. C., pfd.	T5	—
Aragon Mills, S. C.	105	130
Arcadia Mills, S. C.	125	—
Arkwright Mills, S. C.	165	180
Augusta Factory, Ga.	—	38
Avondale Mills, Ala.	140	150
Beaumont Mfg. Co., S. C.	175	200
Belton Cotton Mills, S. C.	125	135
Brandon Mills, S. C.	93	95
Brogan Mills, S. C.	75	85
Calhoun Mills, S. C., com.	102	105
Calhoun Mills, S. C., pfd.	99	—
Chesnee Mills, S. C.	132	140
Chiquola Mills, S. C., com.	134	145
Chiquola Mills, S. C., pfd.	85	88
Clifton Mfg. Co., S. C.	110	115
Clinton Cot. Mills, S. C.	120	—
Courtenay Mfg. Co., S. C.	115	120
Columbus Mfg. Co., Ga.	108	—
D. E. Converse Co., S. C.	100	106
Dallas Mfg. Co., Ala.	116	—
Darlington Mfg. Co., S. C.	—	78
Decotah Mills, N. C.	160	—
Drayton Mills, S. C.	30	—
Duncan Mills, S. C., com.	55	58
Duncan Mills, S. C., pfd.	—	96
Eagle & Phenix Mills, Ga.	102	—
Easley Cotton Mills, S. C.	250	—
Enoree Mills, S. C.	—	75
Enterprise Mfg. Co., Ga.	—	62
Exposition Cot. Mills, Ga.	175	—
Gaffney Mfg. Co., S. C.	—	92
Gainesville Cot. Mills, Ga., com.	80	87½
Glenwood Mills, S. C.	102	—
Glenn-Lowry Mfg. Co., S. C.	—	75
Glenn-Lowry Mfg. Co., pfd.	—	75
Gluck Mills, S. C.	98	101
Graniteville Mfg. Co., S. C.	75	80
Greenwood Cot. Mills, S. C.	135	145
Grendel Mills, S. C.	175	190
Hamrick Mills, S. C.	125	—
Hartsville Cot. Mills, S. C.	200	—
Henrietta Mills, N. C.	185	—
Inman Mills, S. C.	120	—
Inman Mills, S. C., pfd.	100	102½
Jackson Mills, S. C.	150	—
Judson Mills, S. C.	118	125
King, John P. Mfg. Co., Ga.	—	95
Lancaster Cot. Mills, S. C.	150	—
Lancaster Cot. Mills, S. C., pfd.	—	—
Laurens Cot. Mills, S. C.	125	—
Limestone Cotton Mills, S. C.	145	—
Loray Mills, N. C., com.	25	—
Loray Mills, N. C., 1st pfd.	100	108
Marion Mfg. Co., N. C.	125	—
Marlboro Mills, S. C.	130	135
Mills Mfg. Co., S. C.	140	—
Molokhon Mfg. Co., S. C.	115	—
Monarch Mills, S. C.	90	—
Newberry Cotton Mills, S. C.	175	—
Norris Cotton Mills, S. C.	112	—
Oconee Mills, S. C., com.	94	—
Oconee Mills, S. C., pfd.	98	—
Orr Cotton Mills, S. C.	110	113
Pacolet Mfg. Co., S. C.	120	126
Pacolet Mfg. Co., S. C., pfd.	100	—
Panola Mills, S. C.	60	—
Pelzer Mfg. Co., S. C.	135	140
Pickens Cotton Mills, S. C.	130	—
Piedmont Mfg. Co., S. C.	180	185
Po e F. W. Mfg. Co., S. C.	130	132½
Poinsett Mills, S. C.	95	—
Riverside Mills, S. C., com.	8	—
Riverside Mills, S. C., pfd.	110	—
Saxon Mills, S. C.	140	—
Sibley Mfg. Co., Ga.	—	60
Spartan Mills, S. C.	150	175
Toxaway Mills, S. C., pfd.	80	—
Tucapau Mills, S. C.	300	—
Union-Buffalo Mills, S. C., 1st pf	97	98½
Union-Buf. Mills, S. C., 2d pfd.	17	20
Victor-Monaghan Mills, S. C.	—	—
Victor-Monaghan Co., S. C., common	93	96
Victor-Monaghan Co., pfd.	—	64
Victor-Monaghan Co., pfd.	90	92½
Ware Shoals Mfg. Co., S. C.	110	—
Warren Mfg. Co., S. C.	60	—
Warren Mfg. Co., S. C., pfd.	85	—
Watts Mills, S. C., com.	10	—
Watts Mills, S. C., pfd.	30	—
Whitney Mfg. Co., S. C.	120	—
Williamston Mills, S. C.	115	125
Woodruff Cot. Mills, S. C.	120	126
Woodside Cotton Mills, S. C., com.	75	—
Woodside Cotton Mills, pfd.	—	75
Woodside Cotton Mills, S. C., guaranteed	—	83
W. S. Gray Cotton Mills, S. C.	155	—

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Start Easiest, Run Smoothest, Wear Longest!

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Removes 25% more dirt without loss of stock
Plain bars or pin bars furnished

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Direct and Sulphur Colors Cotton Softeners
Chloride of Lime Soda Ash

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KEYSTONE FIBRE COMPANY

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Seamless Roving Cans, Steel Clad Trucks

Doffing Cars, Mill Boxes

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Our Charlotte Stock consists of a complete line of Electrical Supplies.

ELECTRIC SUPPLY AND EQUIPMENT COMPANY

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CHARLOTTE, N. C.

W. H. Martin, Jr., Pres. Rogers W. Davis, Sec'y Thos. G. Lane, Treas.

W. B. Morgan of Burlington, N. C., spent last week visiting friends at Kannapolis, N. C.

N. W. Lee of the Ossipee Mill, Burlington, N. C., has gone to a hospital at Greensboro, N. C., for an operation.

A. T. Quantz, superintendent of the Arcade Mills, Rock Hill, S. C., has been granted a patent on a loom improvement.

W. R. Hills on Southern Trip.

W. R. Hills representing the old established house of Masury-Young Company, Boston, Mass., is making his eighteenth trip in the South selling those high class specialties, Loom Lubrik, Myco Loom Grease, etc., manufactured by this concern.

Fingers Cut Off in Card.

Little Blake had three of his fingers amputated when he fell into the card cylinder at the Efrd Mfg. Co.'s plant at Albemarle, N. C. Mr. Blake tripped on the card track causing him to fall into the cylinder. His first finger was cut off up into the hand and the second and third fingers were amputated between the second and third joints. It was a very painful accident.

Valuable Book Free.

The Stambow Shuttle Co. announce that they will send free to overseers of weaving, without any obligation on their part, a valuable book, "How to Figure Out and Arrange Pattern Work."

This book formerly sold for \$1.25, but the Stambow Shuttle Co. purchased a large lot of them and are giving them to overseers of weaving for the asking. All that you have to do is to send your name and address to the Stambow Shuttle Co., Woonsocket, R. I.

Meeting of Mill Village Educators.

A meeting of cotton mill village educators of the Carolinas is to be held in Charlotte, N. C., on March 15 and 16, at the Selwyn Hotel. P. P. Claxton, Commissioner of Education, Washington, D. C., will speak. The program is in charge of J. A. Baldwin, president of the Southern Industrial Institute of Charlotte.

Swan & Finch Select Special Representatives.

Swan & Finch Co., of New York, manufacturers of Slo-Flo and other well-known lubricants for textile machinery, have placed L. T. Dougherty as special representative in North Carolina with headquarters in Charlotte, and R. D. Wilde as special representative in South Carolina with headquarters at Greenville.

Swan & Finch Co. are represented in North Carolina by the Textile Mill Supply Co. in South Carolina by the Carolina Supply Co., and in Georgia by the Fulton Supply Co.

L. T. Dougherty and R. D. Wilde will visit the mill trade and assist the selling agents in developing the business of Swan & Finch. They will also assist the mills in any lubricating problems that they have.

Both are experienced men and report that they have met with a most cordial reception at the mills they have visited.

Southern Power Company Has Withdrawn Secondary Power From Sale.

The Southern Power Company with headquarters at Charlotte, N. C., have announced that they have been obliged to withdraw all secondary power from sale. They are now furnishing about 260,000 horsepower, including both primary and secondary power in day time, and about 45,000 horsepower at night. About 80 per cent of this power is used by cotton mills.


It is a common idea that water runs over the dams and goes to waste at night but such is not the case with the Southern Power Co., for every gallon of water is conserved by closing the gates and allowing the water to accumulate and rise above the dam.

They are now developing 100,000 additional horsepower at Wateree near Camden, S. C., and 27,000 horsepower at Bridgewater, N. C., but neither of these developments will be completed before 1919.

Japan Would Produce Its Own Wool

The Japanese authorities are reported by the Japan Chronicle to have been making arrangements with the ultimate object of enabling

ARABOL SOLUBLE SOFTENING OIL




SUPERIOR TO TALLOW and cheaper. Used with starch on all classes of warps. Neutral. Especially valuable on warps, which, while requiring light sizing, must be very strong and smooth. It is strictly uniform and has none of the drawbacks of tallow. Can be used with any kind of starch or sizing material. Is especially valuable when used with a Soluble Gum, such as our Gum G, Yorkshire Gum, Scotch Gum, and the like, all of which attract moisture and lay the fibre, thereby prevent shedding. Arabol Softening Oil penetrates the yarn, and lubricates the fibre. Never gets rancid as tallow does and always keeps the slasher cylinders smooth and bright. The yarn never sticks when this Oil is used. Trial barrel sent on approval.

OIL LUBRICATES—TALLOW DOES NOT

ARABOL MANUFACTURING COMPANY
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CAMERON MacRAE Southern Sales Agent CHARLOTTE, N. C.

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The Largest Manufacturers of Loom Harness and Reeds in America

Loom Harness and Reeds

Slasher and Striking Combs, Warper and Leice Reeds, Beamer and Dresser Hecks, Mending Eyes, Jacquard Heddles

LAWRENCE, MASS.

ROPOSIZE MAKES YARN STRONG

Does Not Scale. Will not turn sour.
Will Bleach Out Easily

Carolina Sizing and Chemical Company
Charlotte, N. C.

TAPE DRIVES

OUR TAPES ARE ENDORSED BY MACHINERY EXPERTS. They know their quality and they know their scientific structure. Exhaustive trials by practically all machinery makers have demonstrated that they have no superior.

Write us.

Barber Manufacturing Co., Lowell, Mass.
SPINNING TAPE SPECIALISTS

this country to be self-supplying in yearly. The newspaper states that wool production. Estimates for the the authorities intend to raise 1,000,000 head during the next 20 years. next financial year by the depart- ment of agriculture and commerce, Breeds will be imported by the Gov- it states, provide for an expenditure ernment, chiefly from Australia or of 302,658 yen (150,875) as a fund Great Britain, and will be sold or for the encouragement of sheep distributed free of charge among rearing. This would be expended sheep farmers.—Commerce Reports.

FOR SIZING SLASHOL

WHAT ELSE---When it is the only sizing agent that is absolutely neutral, and needs the assistance of no other compound, oil or tallow. Will not allow the size to chafe or shedd, and will increase the tensile strength of the yarn.

1832 1917
Wm. C. Robinson
& Son Co.

Baltimore, Md.

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GREENVILLE, S. C.
NEWTON, N. C.
ATLANTA
BIRMINGHAM
NEW ORLEANS

Want Department

Want Advertisements.

If you are needing men for any position or have second hand machinery, etc., to sell the want columns of the **Southern Textile Bulletin** affords the best medium for advertising the fact.

Advertisements placed with us reach all the mills and show results.

WANTED—A FEW DRAPER WEAVERS, \$12.00 TO \$15.00 PER WEEK. ALL DAY WORK. WILL PROVIDE TRANSPORTATION. CLIFF BARNES, OVERSEER OF WEAVING, COLUMBUS MFG. CO., COLUMBUS, GA.

Hosiery Mill Superintendent Wanted.

A 40-machine hosiery mill which expects to begin operation in 60 days, wants a competent superintendent who would take some stock. Mill will be situated in Piedmont section. Address Southern Textile Bulletin.

Card Grinder Wanted.

First class card grinder experienced on Saco-Lowell cards. Must be able to manage help. Man with family preferred. Thirty-three new cards. Will pay good man \$15.60 per week. Universal Winders hands wanted on single and two ends up. Spinners for right line. Write: W. A. Prince, Supt., Crown Plant, Macon, Georgia.

Boiler for Sale.

For sale—One new 78x20 return tubular boiler complete. Boiler has never been installed and prompt shipment can be made direct from factory. For details address Manchester Cotton Mills, Manchester, Ga.

Wanted.

Chief Engineer—Master Mechanic wanted for 50,000 spindle mill in Virginia. None but first class Engineer need apply. Address Master Mechanic, care Textile Bulletin.

Pipe For Sale.

2,000 to 3,000 feet of 14-inch iron pipe for sale. Pipe was taken from a dryer and is in good condition. Sanders, Smith & Co., Charlotte, N. C.

Want Beamers and Fixers.

Want two good short chain beamers and one good Draper fixer. Pay \$2.60 per day for each man. Address "Beamer and Fixer," care Textile Bulletin.

Superintendent Wants Position.

Wanted position as superintendent of cloth or yarn mill by a man of energy, ability and long practical experience and successful record. With one mill 10 years. For further information, address G. H. F., this paper.

Loom Harness For Sale.

250 Sets of Loom Harness, 45 inches over all, for 44x44 or 48x52 Sheeting. Have not been used much and in good condition. Address Box 240, Greenville, S. C.

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Difficult and rejected cases specially solicited. No misleading inducements made to secure business. Over thirty years active practice. Experienced, personal, conscientious service. Write for terms. Address

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Rock Hill, S. C.

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D. B. Mahaffey, Carder and Spinner
J. N. Hollis.....Machinist

Buck Creek Cotton Mills.

Siluria, Ala.

C. G. Voss.....Superintendent
T. J. Rush.....Carder
W. H. Burks.....Spinner
R. L. Clark.....Weaver
J. A. Davis.....Cloth Room
Jack Horton.....Nappers
G. W. Meisenheimer.....M. M.

Erwin Mill No. 4. West Durham, N. C.

P. B. Parks.....Superintendent
B. M. Bowen.....Carder
J. E. Eubanks.....Spinner
J. C. Klutz.....Weaver
C. H. Johns.....Master Mechanic

Mary Leilla Mill.

Greensboro, Ga.

C. H. Gooch.....Superintendent
Byron Cauther.....Carder
J. F. Wharton.....Spinner
O. H. Dillard.....Weaver
Charles Jiles.....Cloth Room
R. F. Goodroe.....Master Mechanic

Rhedhiss Mfg. Co.

Rhodhiss, N. C.

J. W. Kidd.....Genl. Superintendent
A. M. Hastings.....Superintendent
R. L. Arney.....Carder
W. C. Knight.....Spinner
D. E. Medlin.....Weaver
L. E. Hollor.....Cloth Room
S. C. Kincaid.....Master Mechanic

W. P. Leister.

W. P. Leister, for the past two or three years superintendent of the Wallace Cotton Mill, Jonesville, recently resigned his position with that company, and has himself organized a hosiery mill at Forest City, N. C., and will be personally in charge of the new enterprise. The name of the new concern is "Wingo Manufacturing Company," and the paid up capital stock is \$12,000. Mr. Leister with his family has already moved to Forest City and the construction of the new plant is well under way.

Both Mr. and Mrs. Leister, during their stay in Jonesville, won a warm place in the hearts of the people of the community. They were active in the social and religious life of the community and were untiring in their efforts to perform the duties of good citizenship.

Mr. Leister is one of the best mill men in the country; he has a thorough knowledge of the business and his friends not only wish him success, but predict that happy outcome from his new venture.—Union (S. C.) Times.

Courtenay Mfg. Co.,

Newry, S. C.

Jas. M. Alexander.....Superintendent
W. A. Morris.....Carder
G. W. Ray.....Spinner
C. A. Mattison.....Weaver
T. C. McKumkins.....Cloth Room
J. A. Kirby.....Master Mechanic

Neeronssett Mills, Inc.,

Cumberland, N. C.

J. C. Platt.....Superintendent
George McKeathau.....Carder
Donald McKennon.....Spinner
J. M. Permenter.....Master Mechanic

Moore Cotton Mill Co. Lenoir-Valmead, N. C.

J. C. White.....Superintendent
P. A. Chester.....Carder
O. L. Grice.....Spinner
Ed. Cobb.....Master Mechanic

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When trees are showing green and the early shrubs are in bloom, you regret that your mill grounds are not as attractive as they might be.

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Details can be finished in a few days; plants dug and shipped promptly; planting taken care of at once—and your wish is realized. Write us today for an appointment and suggestions.

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Simpsonville, S. C.

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Frank Hammond.....Carder
Pack Pollard.....Spinner
Mack Blakeley.....Weaver
C. D. Barton.....Cloth Room
W. H. Long.....Asst. Supt.
S. C. Lindsay.....Master Mechanic

Fairfax Mill.

Fairfax, Ala.

F. L. Branson.....Superintendent
P. T. Sparks.....Asst. Superintendent
T. W. Stewart.....No. 1 Carder
M. G. Benton.....Spinner
W. H. Thompson.....Weaver
D. W. Sims.....Cloth Room
F. R. Piper.....Bleachery
E. C. Etcheson.....Master Mechanic
J. L. Bowles.....No. 2 Carder
J. L. Reid.....Slasher Room

SUPERINTENDENTS AND OVERSEERS.

We wish to obtain a complete list of the superintendents and overseers of every cotton mill in the South. Please fill in the enclosed blank and send it to us.

.....1917.

Name of Mill.....

Town.....

.....Spinning Spindles..... Looms

..... Superintendent

..... Carder

..... Spinner

..... Weaver

..... Cloth Room

..... Dyer

..... Master Mechanic

Employment Bureau

The fee for joining our employment bureau for three months is \$2.00 which will also cover the cost of carrying a small advertisement for one month.

If the applicant is a subscriber to the Southern Textile Bulletin and his subscription is paid up to the date of his joining the employment bureau the above fee is only \$1.00.

During the three months membership we send the applicant notices of all vacancies in the position which he desires.

We do not guarantee to place every man who joins our employment bureau, but we do give them the best service of any employment bureau connected with the Southern textile industry.

WANT position as accountant. Have had special experience in hosiery mills and in general office work, and can furnish high class references. Address No. 2055.

WANT position as overseer of carding. Have had long practical experience and am now employed. Address No. 2056.

WANT position as superintendent or overseer of carding. Have had long experience as superintendent, also as carder. Fine references. Address No. 2077.

WANT position as superintendent or as carder and spinner. Have had long experience especially in yarn mills and can furnish best of references. Address No. 2084.

WANT position as superintendent of a hosiery yarn mill or hard yarn mill, North Carolina preferred. Experienced in carding and spinning and can give good references. Address No. 2085.

WANT position as master mechanic or electrician. Have had long experience in mill work and can furnish good references. Address No. 2087.

WANT position as superintendent or overseer of carding in large mill. Am now employed as overseer of carding but formerly held position as superintendent. High class references. Address No. 2088.

WANT position as superintendent. Am 48 years old and have been superintendent of cotton mills for 12 or 15 years. Can make any kind of yarn or plain cloth and am strictly sober and a steady man. Good references. Address No. 2091.

WANT position as overseer of weaving. Am qualified to handle either plain or fancy work and am a good manager of help, strictly sober and of good moral habits. Best of references. Address No. 2092.

WANT position as superintendent or overseer of carding in large mill. Have successfully run some of the largest card rooms in the South and can furnish former employers as references. Address No. 2095.

WANT position as superintendent. Have had long practical experience as superintendent of both weaving and yarn mills and am giving satisfaction on present job but wish to change for larger job. High class references. Address No. 2099.

WANT position as superintendent or overseer of large weave room on either plain or fancy weaving. Have experience on both and can furnish first class references as to ability and character. Address No. 2101.

WANT position as superintendent or overseer of carding and spinning. Am now employed but for good reasons prefer to change. High class references. Address No. 2102.

WANT position as overseer of spinning or of carding and spinning in a large or medium mill. Am now employed and giving satisfaction but for good reasons would prefer to change. Address No. 2104.

WANT position as superintendent or manager. Am now filling a large position with entire satisfaction and have made good profits for my present mill. For satisfactory reasons would prefer to change and would like to have a financial interest in the mill which I manage. Can give references of the highest character from all former employers. Address No. 2105.

WANT position as superintendent or overseer of large carding room. Am now employed as superintendent and giving satisfaction but prefer to change. Can furnish high class references. Address No. 2106.

WANT position as overseer of carding and spinning. Am at present overseer of spinning and have several years' experience as overseer of carding. Can furnish good references and would not consider less than \$4.50 per day. Satisfactory reasons for wanting to change. Age 34, married and have family. Address No. 2107.

WANT position as superintendent of small mill at a salary not less than \$150.00 per month. Have had experience in carding and spinning and am also a first class master mechanic. Can give high grade references. Address No. 2108.

WANT position as superintendent or as overseer of weaving. Have had experience in both positions on plain and fancy work. Have I. C. S. Textile Diploma. Am capable of handling a job. Address No. 2109.

WANT position as superintendent. Have held position as superintendent of one of the largest mills in South Carolina, and gave satisfaction. Good references. Address No. 2110.

WANT position as machinist or electrician. Age 33. Experience in mill work and also in oxy-acetylene welding. Good references. Address No. 2111.

WANT position as carder and spinner or overseer of twisting or superintendent of small mill at a salary of not less than \$18.00 a week. Can furnish good references from former employees. Address No. 2112.

WANT position as superintendent of yarn mill. Would not accept job at less than \$150.00 per month. Have had long practical experience in both carding and spinning and also as superintendent. High class references. Address No. 2113.

WANT position as overseer of weaving. Have had long practical experience and am now employed but for good reasons would like to change. Can furnish best of references. Address No. 2114.

WANT position as overseer of weaving or as salesman for compound or sizing. Am now employed and giving satisfaction, but would prefer to change. Address No. 2115.

WANT position as superintendent. Am now employed and giving entire satisfaction but desire to change. Have special experience in carding. Address No. 2116.

WANT position as overseer of weaving on either plain or colored goods. Have had practical experience and can furnish best of references. Address No. 2117.

WANT position as superintendent of yarn or plain weaving mill where quality, quantity and a mill kept in first class condition will be appreciated. Am especially experienced on combed yarns from 14's to 120'. Have 19 years' experience in mills, 7 years as overseer and two years as superintendent. Have diploma from I. C. S. of Scranton, Pa. Am at present employed as superintendent. Address No. 2118.

WANT position as superintendent or overseer of carding or spinning in large mill. Have long practical experience in both positions and at present employed as superintendent. Age 36, sober, steady, industrious and in good health. Address No. 2119.

WANT position as superintendent of either yarn or weaving mill. Am a practical carder, spinner and weaver. Experienced on all kinds of yarn, combed and peeler, local and staple cotton, also in reworking waste. Ten years as overseer of carding and three years as superintendent. Best of references. Address No. 2120.

WANT position as overseer of carding and spinning. Have had long practical experience and am especially strong in the carding department. High class references. Address No. 2121.

WANT position as superintendent. Have held present position for several years and given entire satisfaction, but for good reasons prefer to change. High class references. Address No. 2122.

WANT position as superintendent. Have filled last position of superintendent for 8 years and can give manager of that mill as reference. Address No. 2123.

WANT position as overseer of spinning at not less than \$3.50 per day. Would accept position as second hand at that price. Have good experience and can furnish high class references. Address No. 2124.

WANT position as carder or carder and spinner or superintendent of small mill. Age 33. Am at present overseer of spinning. Am giving satisfaction but would prefer to change. Address No. 2125.

PRACTICAL cotton mill man conversant with the determination of production costs as well as manufacturing details, would like position of responsibility as Executive's Assistant. Personal interview desired. Address No. 2127.

WANT position as overseer of carding. Have had 12 years' experience in card room and can furnish high class references. Address No. 2129.

WANT position as superintendent or overseer of large card room. Am now employed and giving satisfaction but prefer to change. Good references. Address No. 2130.

WANT position as superintendent or overseer of weaving. Have held both positions and given entire satisfaction. Can give former employers as reference. Address No. 2131.

WANT position as superintendent of yarn mill or plain weaving mill. Can furnish A-1 references from past and present employers. Have held present position as spinner and superintendent for six years. No cause for changing except desire larger salary. Address No. 2132.

WANT position as superintendent. Have held position as superintendent in one of the largest mills in South Carolina and have had splendid experience. References if desired. Address No. 2133.

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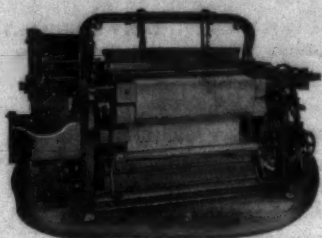
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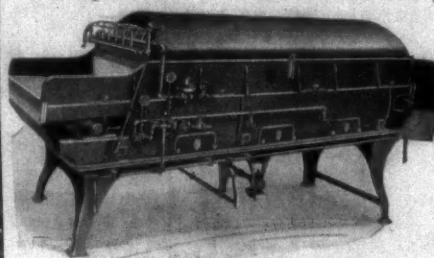
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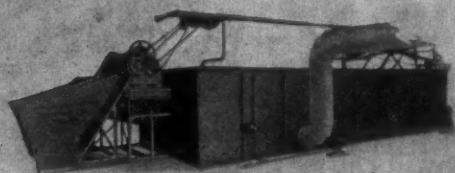
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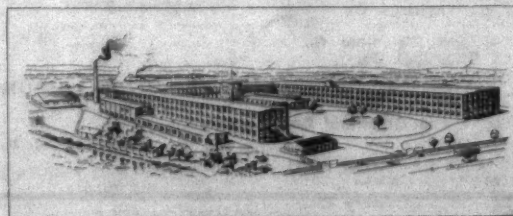
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